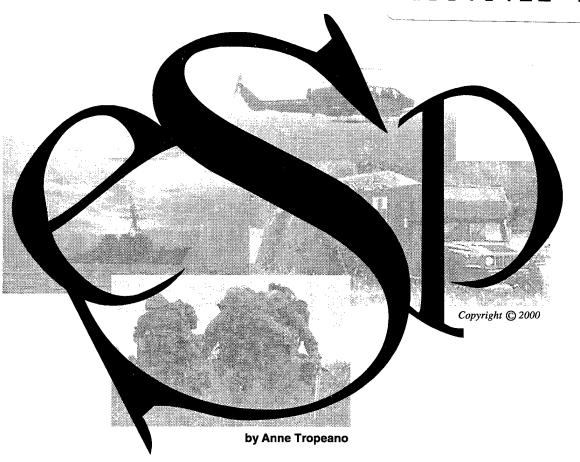
# **Estimating Supplies Program**

Version 1.00

User's Guide

Oct 2000

20010122 043



An easy-to-use Windows®-based software program for military medical providers, planners, and trainers that calculates the amount of supplies and equipment required to treat a patient stream.

Technical Document No. 00-4D, supported by the Bureau of Medicine and Surgery, BUMED-26, Washington, D.C., the Office of Naval Research, Arlington VA, Department of the Navy, and the Marine Corps Systems Command, Quantico, VA under the Work Unit No. 63706N M0095.005-6809. The views expressed in this manual are those of the authors and do not reflect the official policy or position of the Department of the Navy, Department of Defense, or the U.S. Government. Approved for public relaease; distribution unlimited.



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#### **Contributors**

The following members of the Naval Health Research Center's Modeling and Simulation team are responsible for the design and development of the ESP database and computer application. Their medical and logistics knowledge, research expertise, and technical writing skills contributed to the success of the ESP project and this document. They also provided encouragement and teamwork, as well as significant creative support for the project.

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To learn more about the Naval Health Research Center, please visit our website at <a href="https://www.nhrc.navy.mil">www.nhrc.navy.mil</a>.

# **Acknowledgments**

Many organizations and individuals contributed their expertise and time to the development of ESP.

Headquarters, Marine Corps recognized the need to validate the medical and dental supplies carried into forward deployed environments and provided support for the project.

The Marine Corps Systems Command and the Marine Corps Combat Development and Doctrine Center helped set the stage for the many expert review panels by providing the vision and by defining the mission for current and future operational scenarios.

The Joint Readiness Clinical Advisory Board (JRCAB) shared their treatment protocols and databases, attended the expert panels, and provided the joint perspective. The JRCAB encouraged standardization of items and facilitated identification of supply numbers.

The Naval Medical Logistics Command and Blount Island Command attended the subject matter expert panels and provided guidance and clarification in the many logistical issues.

More than 130 medical providers representing a variety of specialties and commands provided their operational and medical expertise to the development of the databases.

**COL Sandra Brunken (JRCAB)**, a major proponent for joint standardization, participated in the expert panels and contributed her many years of operational nursing experience and her joint perspective on clinical requirements.

Finally, we would like to acknowledge **Chief Douglas Lowe (HMC, FMF)** for his commitment to ensuring that our review process met the high standards needed to provide the best quality medical care. His efforts resulted in the incorporation of the latest technology, and his enthusiasm was inspiring and greatly appreciated.

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# introduction

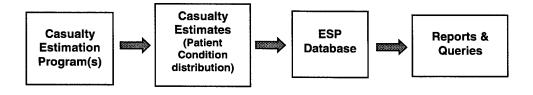
Welcome to the Realm of ESP!
Background Information on ESP
Uses for ESP
A Program Overview
The Casualty Estimation Program for You
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#### Welcome to the Realm of ESP!

The Estimating Supplies Program (ESP) is a user-friendly computer program designed to calculate the amount of supplies required by an operational scenario. Under the sponsorship of the Marine Corps Systems Command, the Naval Health Research Center (NHRC) developed this program for medical providers, trainers, and planners.

ESP offers different ways to get the information you need. One option is to handpick a medical mission scenario by manually entering casualty flow data into ESP. Another option is to import a patient stream from a casualty estimation program. You can also generate the supply requirements for one of ESP's predefined casualty streams. ESP then produces output in the form of easy to read reports that detail supply quantity, weight, cube, and cost. By using casualty estimates, level of care, and functional area, ESP generates the supplies and equipment necessary to treat the given patient distribution.

In addition, ESP offers a query function. This tool is helpful in understanding the relationship among patient conditions (PCs), medical tasks, supplies, and equipment. By querying the ESP database, you can obtain output that lists the supplies and equipment required to perform a task or to treat a specific PC.



# **Background Information on ESP**

NHRC designed, developed, and utilized a systematic process to review the Marine Corps medical supply requirements. This approach consisted of identifying the medical tasks required to treat patients with specific injuries and illnesses and determining the supplies and equipment required by each task. More than 130 Subject Matter Experts (SMEs) with operational experience participated in this process by reviewing treatment briefs, tasks, supplies, and equipment, and by examining their usefulness for Marine Corps medical providers in forward areas of care. To determine the amount of consumable supply requirements, a patient-generating model was used to project the frequency of specific injuries and illnesses likely to occur in theater. Substantial reductions (approximately 30%) in the number of items, weight, and cube were achieved. By establishing the clinical requirement for each item pushed forward, the NHRC model was able to reduce the logistical burden carried by



These are the supplies removed from the Battalion Aid Station AMAL after review, significantly reducing weight, cube, and cost.

Marine Corps units and enhance farforward clinical capability. 1-5 The result of this effort is a database that can be accessed to estimate supplies and equipment based on a given patient stream distribution. It is this database that provides the structure of ESP.

Establishing a clinical requirement for each supply produces an audit trail for each item, and allows existing Authorized Medical Allowance List/Authorized Dental Allowance List (AMAL/ADAL) configurations to be optimized for more current scenarios or revised as Marine Corps policy and doctrine change. This review process was recently used to evaluate a far-forward resuscitative surgical capability.<sup>6</sup> Additional efforts are under way to examine the supply requirements of shipboard medical departments, pharmacy, and dental departments.<sup>7-10</sup>

NHRC has incorporated this research and these databases into ESP to provide you with the ability to calculate the supplies and equipment needed to treat a particular patient distribution.

#### **Uses for ESP**

- Generate the supplies and equipment, including weight, cube, and cost, needed to treat a user-defined patient distribution.
- ✓ Identify the patient distribution and calculate the supplies needed for a specific operational deployment or training exercise.
- Query the database when conducting an AMAL review to help understand the relationship among PCs, medical tasks, supplies, and equipment.
- Query the database to understand the relationship among the level of care, medical tasks, and supplies, and to develop training guidelines.

# **A Program Overview**

ESP basically works like this:

- 1 Log on by providing a user name and password.
- 2 Select an operational scenario. You may choose from several developed scenarios, design your own patient stream, or import one.
- 3 Specify the level of care and functional areas. For example, if you choose surgical company as your level of care, you can select the following functional areas: the operating room, triage, ward, x-ray, pharmacy, laboratory, dental, or preventive medicine.
- 4 If you are designing your own scenario in ESP, enter a patient distribution. You are able to either identify the PCs or identify the patient injury and disease type.
- 5 Select the output. You can choose from reports that summarize supplies, equipment, weight, cube, and cost, as well as other details. You can query the database to see the relationship among PCs, tasks, and supplies.
- 6 View your output. The report or query can be directed to the screen, to various file formats, to the printer, or sent to a colleague via email.

# The Casualty Estimation Program for You

Currently in ESP, you must create your patient stream in a casualty estimation program separately and import it into ESP. Because the ESP databases are constructed according to PC codes, it is important that the patient streams be in this format as well. Ultimately, though, NHRC is working toward updated versions of ESP that offer the ability to go directly into one of the following casualty estimation programs to create your patient stream.

Several casualty estimation programs are available:

#### The Patient Workload Generator (PATGEN)



Developed by the Army, PATGEN generates a workload of patients and models their movement through various echelons of care until they leave the system. The PATGEN model generates casualties by day, patient category, PC code, and

operational region for a given major regional conflict. The calculations are based on population at risk and rate data. PATGEN also projects the number of patients who are evacuated to the next echelon of care, who return to duty, or who die.

#### Ground Casualty Projection System (FORECAS)



Designed by NHRC, FORECAS is a ground casualty forecasting system. It provides estimates of the average daily rates of medical admissions during a given scenario and indicates the maximum daily patient loads

for which planning is necessary. The user identifies the casualty types to be projected, the battle intensity, category of troops, the specific adversary, and length of operation. FORECAS then provides graphic and tabular displays of the overall numbers of patient admissions, as well as the numbers of admissions expected for each PC code.

#### **Shipboard Casualty Projection System (SHIPCAS)**



NHRC built SHIPCAS to estimate the numbers of casualties that may be incurred by shipboard forces. The user enters U.S. task force composition, weapons systems possessed by the adversary, expected battle intensity, length of the operation, and whether the operation is littoral or open ocean. SHIPCAS projects the likely numbers of ships that sustain hits by

enemy forces, the incidence of casualties aboard the individual ships, and the breakdown of the patient load by PCs.

#### **Automated Patient Stream Estimator (APSE)**



APSE is a software program created by the Air Force that generates casualty streams based on a specific scenario and wounded-in-action rates.

It is used to generate air base attack casualty streams based on wartime environments for the evaluation of wartime medical systems and assemblages. However, this model is limited in that only battle casualties resulting from air-delivered conventional weapons are included.

NOTE: Casualty Estimation Process, a model for projecting total casualties and personnel replacements at an operational level of detail, currently does not generate a patient stream that ESP can use. Casualty Estimation Process provides estimates of scenario-based battlefield casualties by type, period, grade, and military occupation specialty. Reports tabulate the estimated casualties by date, time, phase, and force deployed, not by PC code.

#### **How to Use This Manual**

This manual illustrates how to run ESP without complex technical language. No matter what your level of computer skill is, you can understand this guide.

ESP is basically a sequence of screens in which you enter information. Therefore, the manual is written in the same order and should be read from beginning to end. ESP is supported by an extensive database and can perform a variety of functions. Use the manual to help explore all the exciting capabilities that ESP offers.

The chapters in this book follow the sequence of ESP. Chapter 2 shows you ESP basic operations and how to maneuver through the program. Chapter 3 discusses what a scenario is and how to choose the one that suits your needs. Chapter 4 gives you the definitions of levels of care and functional areas, and explains how to select them for your scenario. Chapters 5 and 6 describe the step-by-step process of building your scenario by PC and building your scenario by injury and disease type, respectively. Chapter 7 details the report and query options that ESP offers and how to select one. Chapter 8 explains how to read your output, as well as how to print, save, and send it via email. Appendix A includes a list of references if you want to learn more about the AMAL/ADAL review process. Appendix B lists the PCs that you are able to include in your patient stream. Appendix C is a collection of sample reports.

A Quick Reference is included at the end of the manual so that you can look something up quickly without searching through the document.

So go ahead—explore all ESP has to offer!



# Installing ESP Starting ESP Quitting ESP Quitting ESP The Parts of the Main Screen Viewing Tables Viewing JRCAB Treatment Briefs Understanding the Menu Bar Maneuvering Through Screens Saving Your Work Restarting the Program Undocking and Closing the Toolbar Getting Help

# **Installing ESP**

Installing ESP is very easy—the Installer Wizard does all the work for you. Before you install ESP, check to see if your system meets the following requirements:

#### **System Requirements**

- ✓ IBM or 100% compatible PC with a Pentium processor
- ✓ Windows NT®, Windows® 95, or Windows® 98
- √ 32 MB of application RAM minimum
- ✓ 20 MB free hard disk space
- 1 Close all applications.
- ② If you have a Zip™ disk, insert it into the Zip™ drive. If you have a CD, insert the CD into the CD-ROM drive.
- 3 Double-click the My Computer icon located on your desktop. Double-click the icon to open the Zip™ disk or the drive to open the CD-ROM.
- 4 Drag the espsetup.exe icon located on the disk or CD onto the C:/ icon. Next, double-click the C:/ icon. Then double-click the espsetup.exe icon. The Installation Wizard walks you through the installation process. Follow the dialog boxes.
- (5) Restart your computer.

**NOTE:** If ESP does not install correctly, a potential source of problems is the virus checker. Contact your system administrator to disable it.

# **Starting ESP**

- 1 Click the Start button in the lower left corner of your screen.
- 2 Open the Programs folder then open the Main folder.
- (3) Click the ESP icon to open the Login screen.
- 4 Type your name into the User Name field and press Enter or Tab.
- 5 Type your password into the Enter Password field and press Enter or Tab.



**NOTE:** You have three chances to enter your information correctly. After the third incorrect entry, ESP automatically terminates. Start at Step 1 to try again.

#### TIP: Adding a New User

- 1 Type a new user name and password into the fields in the Login Window and press Enter or Tab.
- 2 A dialog box opens that reads "Would you like to add [user name] as a new user?" Click Yes.
- 3 Type your password in the Confirm field and press Enter. ESP does not accept a new user unless the password matches in both the Password and Confirm fields.

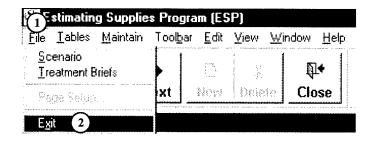
For your convenience, adding a new user is simple. However, your information is still protected because ESP only allows each user to delete or modify his or her own scenario. This safeguards your work from being mistakenly altered or deleted.



**NOTE:** If you decide you do not want to add a new user after you clicked Yes in Step 2, press the ESC key to exit the program.

## **Quitting ESP**

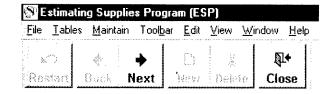
- 1 Click on the File menu located in the top left corner of the screen.
- 2 Choose Exit.



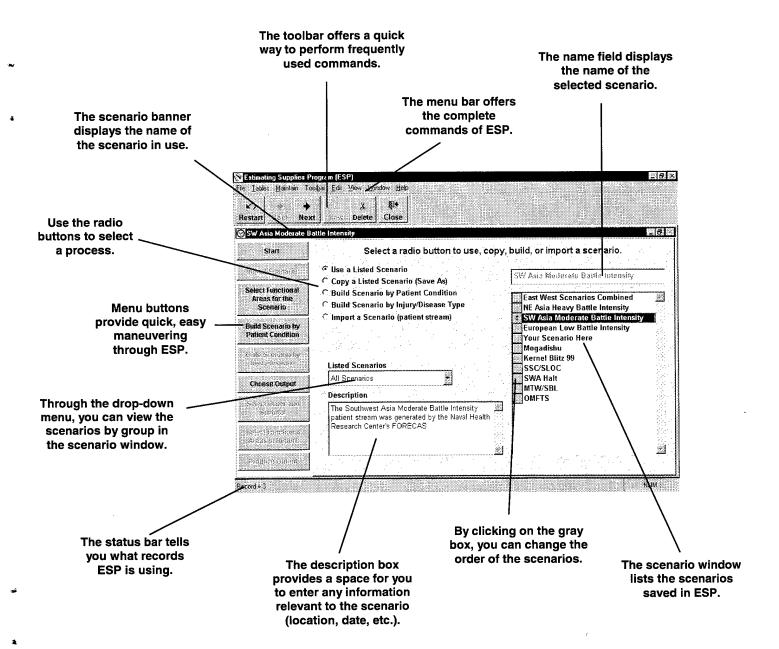
**NOTE:** You cannot exit the program by clicking the X located in the upper right corner of the ESP window. You must exit through the File menu.

#### TIP: Closing the Active Window

In ESP you have the option to open more than one window at once (i.e., treatment brief, table, or scenario). If you just want to close the active window without quitting ESP, click *Close* on the toolbar. This prevents you from having to Login again.



# The Parts of the Main Screen

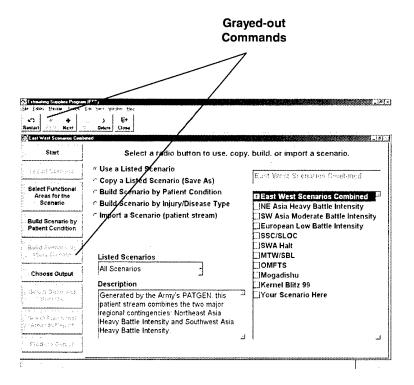


#### TIP: Grayed-Out Commands

Words that are grayed out in ESP indicate inactive commands. The status of grayed-out commands changes as you progress through the program.

For example, when the program opens, every option except the *Start* and *Choose Output* buttons is grayed out, or inactive. However, as soon as you choose a radio button, certain buttons change from grayed out to active.

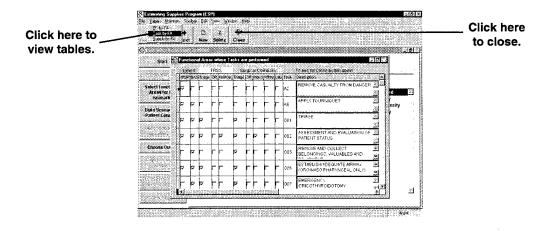
If you try to activate a grayed-out command, ESP does not respond. You do not see an error message. Continue to an active button with your mouse or click *Next* on the toolbar to open the next available screen.



**NOTE:** Some functions in ESP are in red typeface. Red type signifies that the functions are currently under construction.

# **Viewing Tables**

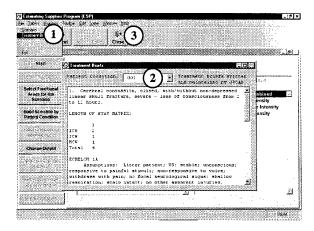
ESP offers tables that provide the PCs, tasks, and supplies applicable to each functional area. Just click the Tables menu and select the desired table. When you are finished using the table, click *Close* on the toolbar.



# **Viewing JRCAB Treatment Briefs**

ESP offers treatment briefs provided by the Joint Readiness Clinical Advisory Board for PCs 1-371.

- $\bigcirc$  Click the File menu and select Treatment Briefs.
- 2 Select the brief of your choice from the drop-down menu.
- 3 Click Close on the toolbar when finished.



## **Understanding the Menu Bar**

There are eight menus located on the menu bar at the top of the screen.

#### File

Allows you to open the Scenario Wizard, view treatment briefs for each PC, or exit the program. Page Setup is for report maintenance and is only available to NHRC users.



#### **Tables**

Allows you to view tables that show which PCs, tasks, and supplies are applicable to each functional area.



#### Maintain

Allows only NHRC users to update ESP program and database files.



#### **Toolbar**

Allows you to perform the frequently used ESP commands that help you maneuver through the program. These are also available on the toolbar.



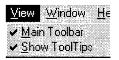
#### Edit

Allows you to perform simple editing procedures when working in text fields.



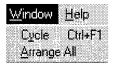
#### **View**

Allows you to view or close the toolbar. Also allows you to show or hide ToolTips, which are help banners that appear with information about certain items on the screen.



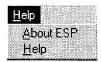
#### Window

Allows you to perform basic commands that organize the windows you are working in. Cycle brings the back window to the front. The Arrange All command places all open windows side by side.



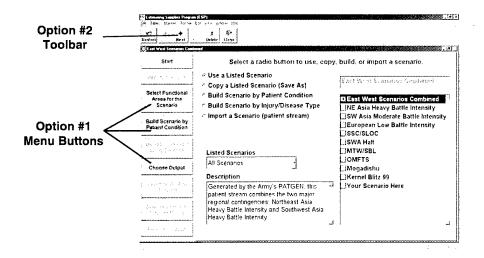
#### Help

Allows you to get help with the program. Also, offers background information on ESP that includes the website addresses for NHRC and the Marine Corps Systems Command.



## **Maneuvering Through Screens**

There are two ways to maneuver through ESP.



#### **Option #1: Menu Buttons**

The menu buttons on the left side of the screen are used to move through ESP. Each button indicates a different screen. Using your mouse, click the active button that indicates the screen you would like to view. For example, if you click the *Choose Output* button, you open the screen that allows you to pick your desired output.

Menu buttons allow you to move freely to any active screen. You do not have to proceed in any particular order. However, it is <u>strongly recommended</u> that you follow the sequence provided by the active buttons.

#### Option #2: Toolbar

The toolbar located at the top left of the screen can also be used to maneuver through ESP. The toolbar only allows you to move to the next active screen or back to the previous screen. You cannot jump to any active screen as when using the menu buttons. Using your mouse, click *Next* to move one screen forward or *Back* to move to the previous screen.

**NOTE:** The screen you are operating in is indicated by blue text in the menu buttons.

# **Saving Your Work**

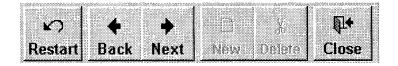
Saving your work is easy with ESP because you never have to. ESP saves your information as you work; this feature prevents you from losing any of your data.

# **Restarting the Program**

The *Restart* button is located in the toolbar and is functional at any point in ESP. Clicking *Restart* returns you to the Start screen. The Start screen is reset, with many of the menu buttons grayed out as when you first open ESP.

The *Restart* button does not clear the information entered in the scenario in use when the restart feature is activated. For example, if you create a new scenario called "New," enter the functional areas, and press *Restart*, the scenario "New" still exists, complete with the functional areas.

In other words, restarting does not delete or clear information; it simply gives you the opportunity to start using ESP from the beginning.



# **Undocking and Closing the Toolbar**

The toolbar is docked at the top of the ESP screen by default. However, the toolbar can be undocked or closed, according to your preference.

#### **Undocking the Toolbar**

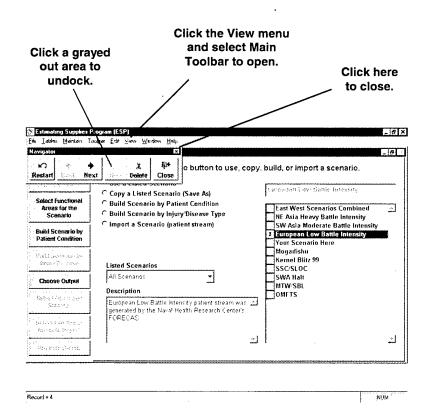
Double-click on any area of the toolbar that is not active.

#### **Closing the Toolbar**

Undock the toolbar. Click on the X in the upper right corner of the toolbar. The toolbar's commands are available through the Toolbar menu on the menu bar.

#### **Opening the Toolbar**

Click View on the menu bar and select Main Toolbar.



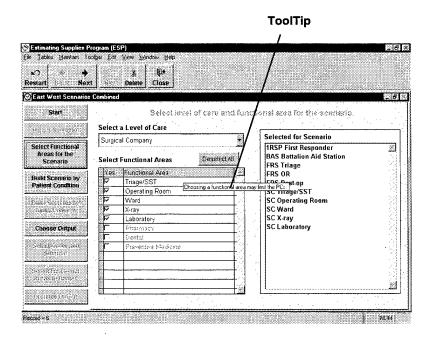
# **Getting Help**

ESP offers three different kinds of help.

#### **ToolTips**

ToolTips are flags of information that appear when you pass your mouse over certain items on the ESP screen. ToolTips are helpful for simple explanations of ESP items and operations.

Just place your mouse near the item in question to view the ToolTip. If you continue to move your mouse once the ToolTip becomes visible, it disappears.



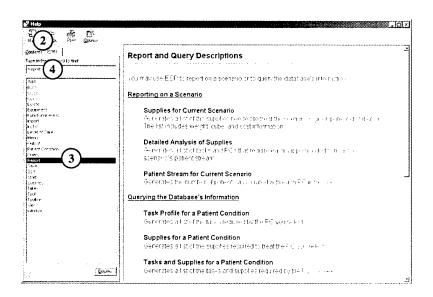
**NOTE:** To shut off ToolTips, go to the View menu and select Show ToolTips. This removes the check mark on the menu, deselecting ToolTips help.



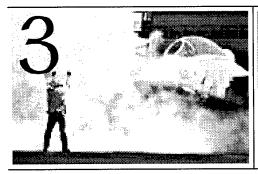
#### **Contents and Index Help**

Contents and Index Help are available through an on-line help window. Organized by subject, Contents Help allows you to view the contents of the entire Help file. Index Help allows you to view an alphabetical listing of terms and functions associated with ESP.

- 1 Press F1 on your keyboard or select Help from the Help menu on the menu bar at the top of the screen.
- (2) Click the Contents tab or the Index tab.
- 3 In Contents Help, click a folder icon to display a list of topics on a specific subject. Click a topic to display the help information. In Index Help, items are shown in alphabetical order. Click an item to display the help information.
- 4 In Index Help, you can enter a few letters in the keyword field to display a list of topics that begin with those letters.



**NOTE:** To use the on-line Contents and Index Help, you must have Internet access and your computer must have Internet Explorer 4.0 or higher.



# choosing a scenario

What's the Scenario?
Using a Listed Scenario?
Copying a Listed Scenario
Building a Scenario by Patient Condition
Building a Scenario by Injury/Disease
Importing a Scenario
Deleting a Scenario
Ordering Your Scenarios

#### What's the Scenario?

The first thing you need to do when working in ESP is select a scenario. You have several choices.

#### Use a Listed Scenario

Choose a scenario that has already been created and is named in the scenario window of the Start screen. ESP comes with ten canned scenarios. East West Scenarios Combined was generated in PATGEN; NE Asia Heavy Battle Intensity, SW Asia Moderate Battle Intensity, European Low Battle Intensity, SSC/SLOC, SW Asia Halt, MTW–SBL, and OMFTS were generated in FORECAS. The Mogadishu scenario consists of data gathered from the Mogadishu raid, and the Kernel Blitz 99 scenario was generated by trainers for the Kernel Blitz exercises in 1999.

#### Copy a Listed Scenario

Modify a scenario that another user created by copying the listed scenario.

#### **Build a Scenario by Patient Condition**

Handpick the patient stream for a scenario by selecting PCs.

#### **Build a Scenario by Injury/Disease**

Build the patient stream by selecting the injury or disease type. PC codes are not necessary for this option.

#### Import a Scenario

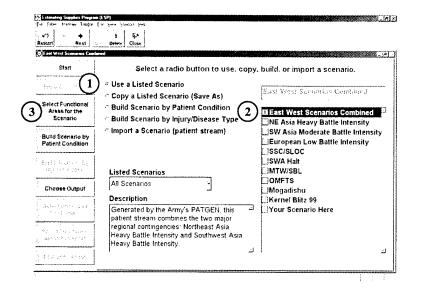
Import a patient stream created outside ESP:

- ✓ PATGEN, FORECAS, SHIPCAS, or APSE scenarios
- ✓ .DBF files (Access, Excel, and FoxPro create .DBF files)
- ✓ ASCII text files (.TXT)
- ✓ Excel files (.XLS)

**NOTE:** ESP provides a space for you to type in a description of your scenario. Details may include battle intensity, dates, location, etc.

# **Using a Listed Scenario**

- 1 Click the radio button that reads Use a Listed Scenario.
- Click the scenario that you want to use.
- 3 Click the Select Functional Areas for the Scenario button or click Next on the toolbar.



### TIP: Modifying a Listed Scenario

By making your choice on the Start screen, certain grayedout buttons are now active. You can only modify the listed scenario if you were the one to create it. If this is the case, the next step depends on the amount of modification you want to do. For example, to modify the functional areas, click the *Select Functional Areas for Scenario* button. To add PCs, click the *Build Scenario by PC* button. However, it is <u>strongly recommended</u> that you first read the manual to understand how ESP works.

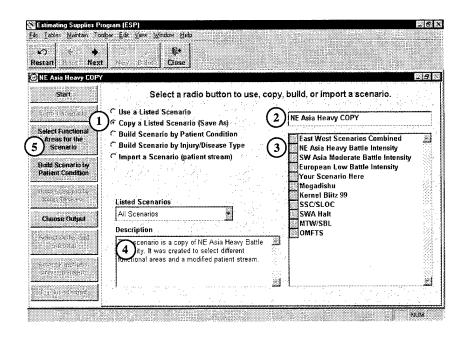
If you did not create the listed scenario, then you can only report on the existing data. Click the *Choose Output* button to select the report or query of your choice. To modify a scenario you did not create, use the Copy a Listed Scenario option on the following page.

**NOTE:** If you are unsure which screen to proceed to, click Next on the toolbar.

# **Copying a Listed Scenario**

- 1 Click the radio button that reads Copy a Listed Scenario.
- 2 Type in a name.
- 3 Click the scenario you want to copy.
- 4 Modify the description, if desired.
- 5 Click the Select Functional Areas for the Scenario button or click Next on the toolbar.

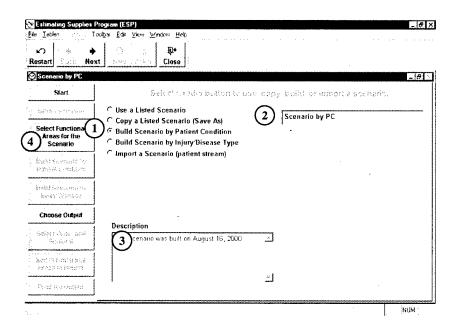
Once you complete Step 3, certain menu buttons become activated. The next step depends on the amount of modification you want to do. For example, to modify the functional areas, click the *Select Functional Areas for Scenario* button. To add PCs, click the *Build Scenario by PC* button. However, it is strongly recommended that you first read the manual to understand how ESP works.



**NOTE:** ESP includes ten scenarios created by NHRC. You cannot directly alter these scenarios. Instead, copy the desired scenario to a new name to modify.

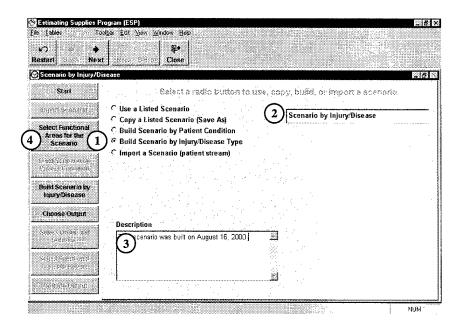
# **Building a Scenario by Patient Condition**

- Select the radio button labeled *Build Scenario by Patient Condition*.
- 2 Type in the name of your new scenario and press Enter.
- 3 Enter a description of the scenario.
- 4 Click the Select Functional Areas for the Scenario button or click Next on the toolbar.



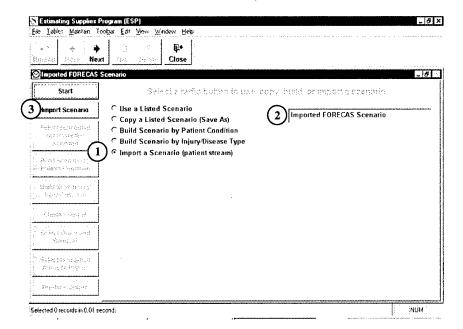
# **Building a Scenario by Injury/Disease**

- 1 Select the radio button labeled *Build Scenario* by *Injury/Disease* with your mouse.
- 2 Type in the name of your new scenario and press Enter.
- 3 Enter a description of the scenario.
- 4 Click the Select Functional Areas for the Scenario button or click Next on the toolbar.



# Importing a Scenario

- 1 Click the radio button that reads *Import a Scenario* (patient stream).
- Type in the name you want to call the new scenario once it is imported (it does not automatically call up the name you gave your electronic file). Press Enter.
- 3 Click the *Import Scenario* button or click *Next* on the toolbar to open the Import Scenario screen.

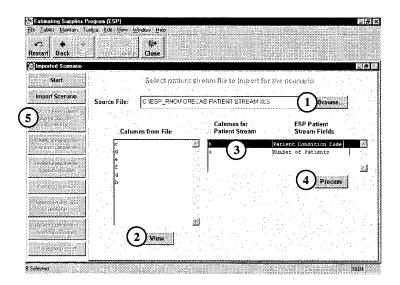


ESP automatically generates a description for your imported scenario that states the name of the electronic file from which the scenario was imported. If you want to add to this description, you must first finish the import process described on the next page.

**NOTE:** The file that you import should be designed so that one column in the spreadsheet corresponds to PC code and another column corresponds to the number of patients with that PC.

#### **Importing Your File**

- 1 To import an Excel (.XLS), ASCII (.TXT), or .DBF file, click the *Browse* button and double-click the file to import.
- 2 The columns in your file are displayed in the Columns from File box. Click *View* to display the information contained in these columns (optional). When finished, click the X in the upper right corner to Close.
- 3 Drag the column (in the Columns from File box) that corresponds to PC Code to the area labeled Columns for Patient Stream. Next, drag the column that corresponds to the Number of Patients field.
- (4) Click Process.
- 5 Click the Select Functional Areas for the Scenario button or click Next on the toolbar.

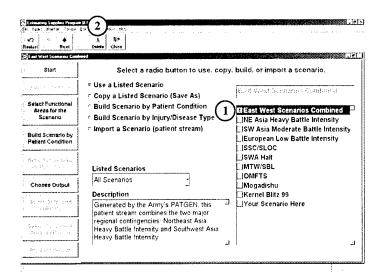


If you want to modify the description, click the ESP *Start* button and click the scenario you just imported. Next, click your mouse in the description box and type your information. Then click the *Select Functional Areas for the Scenario* button.

**NOTE:** When importing an Excel or ASCII text file, a dialog box opens. For Excel, select the version of the imported file. Also, if your file has more than one worksheet, type in the name of the one to import. For an ASCII text file, select the type of character used to separate the values (i.e., comma, space, tab) in the file and what character surrounds the text value (i.e., quotes). Click the appropriate radio buttons. **Click Close on the toolbar when you are finished.** 

# **Deleting a Scenario**

- 1 Select the scenario you want to delete.
- 2 Click the *Delete* button located in the toolbar, or select delete from the Toolbar menu.

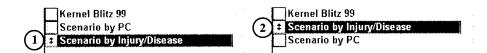


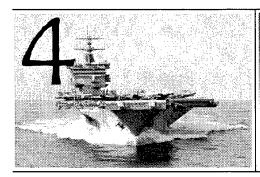
**NOTE:** You cannot delete scenarios that are created by another user or by NHRC.

# **Ordering Your Scenarios**

ESP allows you to change the order of your scenarios. However, you can not reorder NHRC scenarios.

- 1 Click the little gray box next to the scenario you want to move. The box shows a double-sided arrow.
- 2 Clicking and holding your mouse down, move the item up or down to the desired position and release the mouse.





# selecting functional areas

About Level of Care and Functional Area
The Parts of the Select Functional Areas Screen
Choosing Level of Care
Choosing Functional Areas
Deselecting Functional Areas
Viewing Your Selections

#### **About Level of Care and Functional Area**

ESP allows you to select level of care and functional area for your scenario. However, when selecting functional area, keep in mind that different PCs require treatment at different functional areas. An explanation of the levels of care, followed by a short description of the functional areas, is provided below.

#### **LEVELS OF CARE**

#### First Responder

The Company Corpsman is the first to administer medical treatment to a casualty, performing first aid and emergency procedures.

#### **Battalion Aid Station (BAS)**

BAS is positioned as close as possible to forward line troops and offers clinical assessment. The treatment administered here includes the use of intravenous fluids, antibiotics, preservation of the airway by surgical procedure, and application of more secure splints and/or bandages. BAS provides initial resuscitation and routine health services. Theater sick call supplies are carried by BAS.

# Forward Resuscitative Surgery (FRS)/Shock Trauma Platoon (STP)

FRS can serve as a forward element of the surgical company or as a stand-alone surgical element co-located with a BAS. FRS provides limited triage/preoperative trauma management and postoperative holding capability, and it is equipped to provide life- and limb-saving staged surgical procedures. Includes triage, operating room\* (OR), and ward. STP can serve as a beach evacuation station, reinforce a BAS, operate as an intermediary casualty collecting and clearing point between forward elements and the surgical company, or serve as the forward element of a surgical company (i.e., triage/evacuation platoon) preparing to relocate. FRS includes triage, OR\*, and ward.

<sup>\*</sup>Any level of care that includes OR capabilities is assumed to have one OR with two tables. You cannot select for more than one OR.

#### Surgical Company (SC)

The object of care is to save life and limb, provide initial resuscitative treatment, and perform stabilization for evacuation for those casualties whose medical requirements exceed SC capabilities. SC has greater surgical and medical capabilities than BAS, including OR\*, triage, ward, x-ray, pharmacy, laboratory (lab), dental, and preventive medicine.

#### Small Ships/Independent Duty Corpsman (IDC)

The IDC is the first to administer medical treatment to a casualty on a small ship, providing first aid and emergency procedures. Ship capabilities also include sick call, lab, battle dressing station (BDS), portable medical locker (PML), antidote locker, first-aid box, emergency response kit, and preventive medicine.

#### **Submarines**

These nuclear-powered warships are designed for under-thesurface operations with sick call, lab, BDS, PML, antidote locker, first-aid box, emergency response kit, and preventive medicine.

#### Landing Ship Dock (LSDs)/General Medical Officer (GMO)

LSD is a ship designed to transport and launch loaded amphibious craft and/or amphibian vehicles and to render limited docking and repair services to small ships and craft. The GMO is the first to administer medical treatment to a casualty on the LSD. LSD offers clinical assessment and initial resuscitation. The treatment administered here includes the use of intravenous fluids, antibiotics, preservation of the airway by surgical procedure, and application of more secure splints and/or bandages. Additional capabilities include sick call, lab, BDS, PML, antidote locker, first aid box, emergency response kit, and junior emergency response kit.

#### LHAs/LHDs

An LHA is a general-purpose amphibious assault ship and an LHD is a general-purpose amphibious assault ship with internal dock. The object of care is to save life and limb, provide initial resuscitative treatment, and perform stabilization for evacuation for those casualties whose medical requirements exceed LHA/LHD capabilities. The ships' capabilities include triage, lab, x-ray, OR\*, ward, pharmacy, dental, BDS, PML, antidote locker, first-aid box, emergency response kit, junior emergency response kit, and preventive medicine.

#### **Aircraft Carriers**

Aircraft carrier capabilities include triage, lab, x-ray, OR\*, ward, pharmacy, dental, BDS, PML, antidote locker, first aid box, emergency response kit, junior emergency response kit, and preventive medicine.

<sup>\*</sup>Any level of care that includes OR capabilities is assumed to have one OR with two tables. You cannot select for more than one OR.

#### **FUNCTIONAL AREAS:**

**Triage/SST** provides receipt, resuscitation, and sorting of casualties and treats casualties with battle injuries, nonbattle injuries, and those who can return to duty within 72 hours. The Triage/SST is configured to render general surgical support and pre-operative clinical functions. Supplies are also configured to provide resupply to line corpsmen.

**Operating Room\*** provides resuscitative/stabilizing surgery to casualties unlikely to survive medevac.

**Ward** provides monitoring and recuperative care to postoperative patients and those that can return to duty within 72 hours.

**X-ray** provides x-ray section and processing capabilities.

**Lab** provides hematology, microbiology, blood chemistry, and urinalysis capabilities.

Battle Dressing Station provides triage, resuscitation, and initial stabilization to casualties wounded in action.

**Portable Medical Locker** provides mobile, flexible casualty care to casualties wounded in action.

**First-Aid Boxes** provides crew members with supplies to manage casualties wounded in action and those with serious nonbattle injuries.

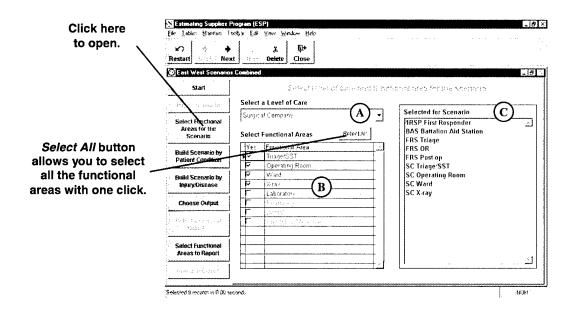
**Emergency Response Kits** provides mobile, flexible casualty care.

**Junior Emergency Response Kits** provides mobile, flexible casualty care.

**Dental** provides emergent and force-sustaining dental care.

<sup>\*</sup>Any level of care that includes OR capabilities is assumed to have one OR with two tables. You cannot select for more than one OR.

#### The Parts of the Select Functional Areas Screen



# A Drop-Down Menu

This menu allows you to choose the level(s) of care for your scenario.

# (B) Checklist

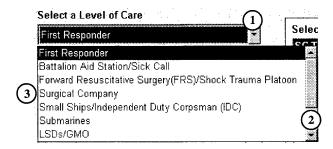
The checklist shows the functional areas available at the level of care chosen in the drop-down menu. The functional area options change with what you select as the level of care. For example, if you choose SC in the drop-down menu, then the checklist includes OR, triage, x-ray, ward, and so on. If you choose First Responder as the level of care, First Responder is listed as the only functional area available.

## © Selected for Scenario box

This box keeps track of the functional areas you choose. At any point during the program, you can refer to this box for a list of your selections.

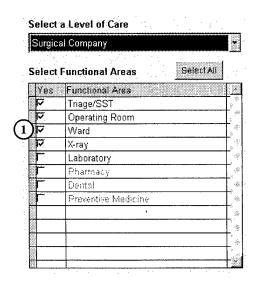
# **Choosing Level of Care**

- 1 Point your mouse on the small arrow to the right of the drop-down menu and click once.
- Use the scroll bar on the right to find your choice.
- (3) Click your choice on the list.



## **Choosing Functional Areas**

- 1 Click the small checkbox to the left of each functional area you want to include.
- 2 Click *Next* on the toolbar. ESP opens either the Build Scenario by Injury/Disease screen or the Build Scenario by PC screen.



**NOTE:** To select all the functional areas listed, click the Select All button.

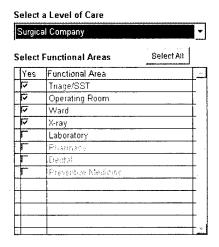
#### **Deselecting Functional Areas**

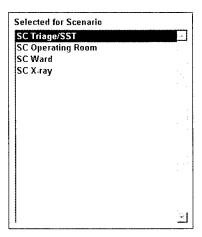
Deselect one or more functional areas by clicking the small checkbox to the left of each item. The check mark disappears to indicate that the item is deselected. If all of the functional areas within a level of care are checked and you would like to clear all your choices, click the *Deselect All* button.

You can also deselect the functional areas through the Selected for Scenario box. Just double-click on the item to delete it. When finished, click *Next* on the toolbar.

## **Viewing Your Selections**

All of the functional areas you select are displayed in the Selected for Scenario box. The level of care of the functional area is indicated by an abbreviation before its name. For example, x-ray is noted in the Selected for Scenario box as SC X-ray. SC indicates surgical company, which is located in the drop-down menu.







# building by pc

What to Know About Building by PC
The Parts of the Build Scenario by PC Screen
Adding New PCs to the Patient Stream
Deleting PCs From the Patient Stream
Increasing or Decreasing a PC in the Patient Stream
Sorting PCs
Viewing the Patient Stream by Category
Adding PCs by Category

## What to Know About Building by PC

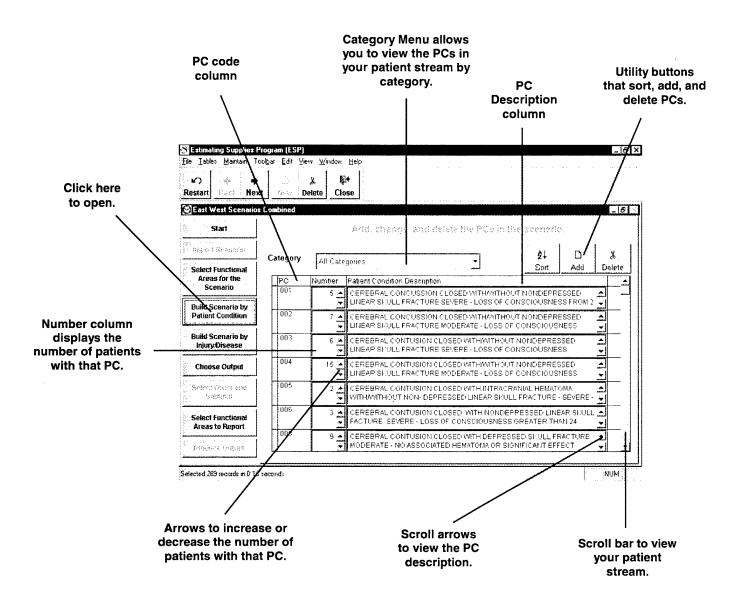
To build your patient stream by PC, all you have to do is choose the PC codes to include in your scenario, along with the number of each one (Appendix B lists the PC codes).

There are a couple of things to remember when building your scenario by PC. First, remember that not all PCs are treated at all functional areas. Therefore, when you are adding PCs to your patient stream, keep in mind which functional areas you selected. The functional areas may change the PCs that are available for your patient stream. For example, if you choose BAS/Sick Call, you view all PCs when adding. However, if you choose Emergency Response Kits, you view only the emergent, nonambulatory PCs.

Second, if you want to add PCs to a scenario with more than one functional area, ESP shows you a combined list of the PCs treated at the selected functional areas. You do not see an individual list of PCs treated by each area.

Third, the functional areas you select do not affect the patients you have already entered into ESP. For example, say you select BAS for your functional area and add sexually transmitted disease PCs to your patient stream. If you decide to change your functional area to FRS, the patients with STD PCs are still in your patient stream although FRS does not treat them. If you report only on the FRS, ESP does not display the supplies required to treat the patients with STD PCs. Therefore, ESP provides you with only the data relevant to the selected functional areas.

### The Parts of the Build Scenario by PC Screen

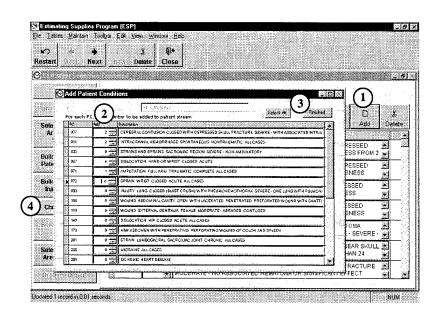


## **Adding New PCs to the Patient Stream**

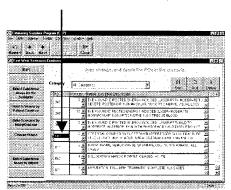
1 Click the *Add* button to open the Add Patient Conditions screen.



- 2 A list of PCs opens in a new window (this list shows the PCs treated at the selected functional areas). Click the up arrow or type the quantity in the Add box of the desired PCs.
- 3 Click *Finished*. The selected PCs are now displayed in the Build Scenario by Patient Condition screen.
- 4 Click the Choose Output button or click Next on the toolbar.



**NOTE:** When adding PCs to an existing patient stream, the PCs you add are placed at the bottom of the list. The first of the added PCs is highlighted. In this figure, PCs 007, 011, 067, and 071 were added to the existing patient stream.



#### TIP: Selecting All Patient Conditions

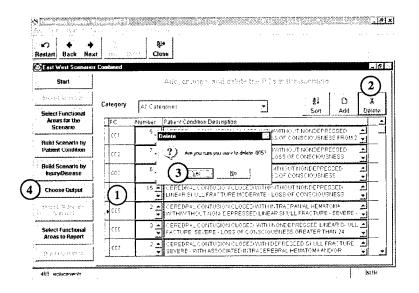
To select one of every PC on the list, press the *Select All* button. The number "1" appears in the Add box of each PC.

Once used, the Select All button changes to read Select None. If you want to undo the Select All feature, press the Select None button.



# **Deleting PCs From the Patient Stream**

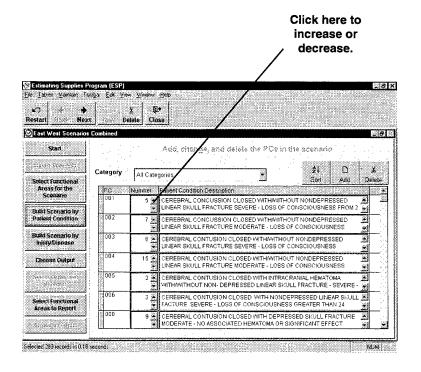
- 1 In the Build Scenario by Patient Condition screen, click the PC you wish to delete.
- 2 Click the *Delete* button located in the upper right corner of the screen.
- A dialog box opens to ask if you would like to delete the PC. Click Yes. Repeat the process for as many PCs as you want.
- When finished, click the *Choose Output* button or click *Next* on the toolbar.



NOTE: You can only delete one PC at a time.

#### Increasing or Decreasing a PC in the Patient Stream

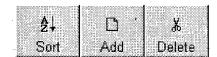
To change the quantity of a PC already in your patient stream, click the up arrow to increase the quantity and the down arrow to decrease it. You can also type in the quantity. When you are finished, click the *Choose Output* button or click *Next*.



**NOTE:** You do not have to click Add unless you are adding a PC that is not in your patient stream.

## **Sorting PCs**

To sort the PCs by PC code in ascending order, simply press the *Sort* button.



**NOTE:** After you use the sort feature, the Sort button grays out. This is to let you know that you have already sorted and cannot use the feature at the present time.

### **Viewing the Patient Stream by Category**

When building by PC, ESP gives you the option to view the PCs in your patient stream by the following categories:

Abdomen & Pelvis

Battle Fatigue

Burns

Cardiovascular Chemical or Biological

Dental

Dermatological

Directed Energy Weapon

Eye Lesion

Environmental Eye/Ear Disease

Female Specific
Gastrointestinal

General Genito Urinary

Head

Infectious/Parasitic

Lower Limbs

Miscellaneous

Multiple Injury Wounds

Neuropsychiatric Preventive Medicine

Respiratory

Sexually Transmitted

Disease

Shipboard Injury

Spine

Sprains & Strains

Superficial/Soft Tissue

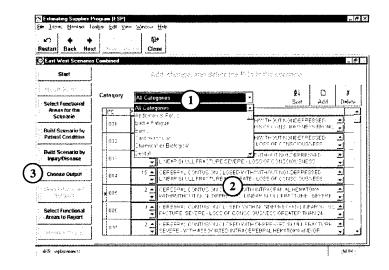
Surgical

Thorax

Upper Limbs

#### To view your patient stream by category:

- Click the drop-down menu and select the category.
- (2) The PCs now shown fall under only the selected category.
- (3) When finished, click the *Choose Output* button or click *Next* on the toolbar.

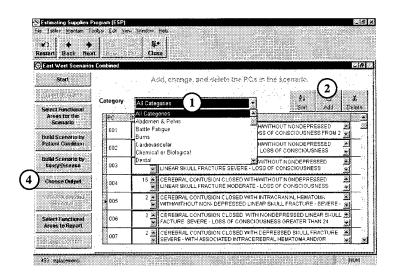


## **Adding PCs by Category**

ESP also gives you the option to add PCs by category. When you select a category, you are choosing to view only the PCs in that category treated at the selected functional areas. You can only add by one category at a time.

#### To add PCs by category:

- 1 Click the drop-down menu and select the category.
- 2 Click *Add*. The PCs listed in the new window belong only to the chosen category.
- (3) Select the PCs to add and click *Done*.
- 4 Repeat the process for as many categories as you would like. When finished, click the *Choose Output* button or click *Next* on the toolbar.



**NOTE:** You may try to add PCs when filtering by a category that is not treated at the selected functional area. For example, there are no STD PCs treated by FRS. In this case, a warning box opens. Click OK and select a different category.





# building by injury/disease

What Is Building by Injury/Disease?
The Parts of the Build Scenario by Injury/Disease Screen
Adding New Casualties to the Patient Stream
Deleting Casualties From the Patient Stream
Increasing a Casualty Type in the Patient Stream
Decreasing a Casualty Type in the Patient Stream
Sorting the Patient Stream

## What Is Building by Injury/Disease?

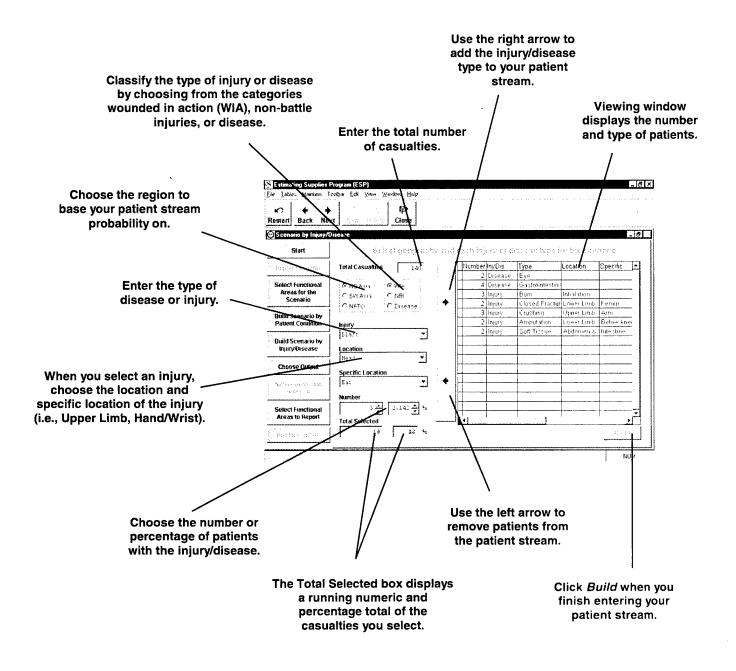
ESP allows you to enter your patient stream by injury and disease type. When entering an injury, you can choose how specific you want to be when entering its location.

The more specific you are when entering injuries, the more accurate ESP is. For example, say you generate a report showing the patient stream for a scenario that was built by injury/disease type. There may be some instances where ESP lists more casualties than the total number you entered. This is because ESP uses casualty estimate probabilities to generate your patient stream. If you enter one patient with a sprain/strain but don't specify location, this injury could be in any number of places. Therefore, ESP assigns one of each possible injury location to that one casualty because there is a possibility that any one of those injuries could occur. Accounting for one of each sprain/strain injury, ESP generates the supplies you need to successfully treat all of those cases. Therefore, you may end up with a slightly higher number of casualties and a slightly larger quantity of supplies. If you need to be more accurate, it is recommended that you build your patient stream by PC.

Unlike when building by PC, ESP does not filter by functional area when selecting injury and disease type. Therefore, you may enter an injury or disease type that is not treated at the functional areas you selected for your scenario. Although the casualties are included in the patient stream, the report does not include supply information that is not relevant to the functional areas you selected.

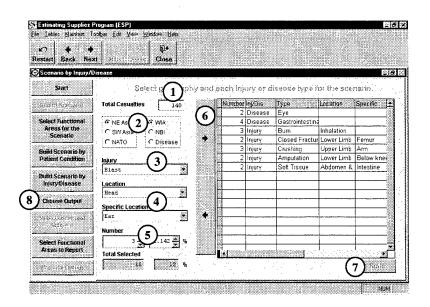
Lastly, if you decide to run the Patient Stream for Current Scenario report on a scenario built by injury/disease type, please note that the categories listed on the first page of the report differ from the categories on the Build Scenario by Injury/Disease screen. This is because ESP maps each injury and disease type you enter to a PC Code. PC Codes fall into the categories listed on page 5-6; these are the categories listed on the front of the report.

## The Parts of the Build Scenario by Injury/Disease Screen



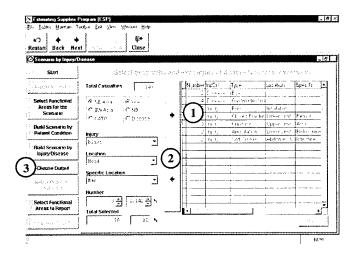
## **Adding New Casualties to the Patient Stream**

- Enter the total number of casualties for your patient stream (optional). If you choose to leave the Total Casualties field blank, the Total Selected percentage field at the bottom of the screen is always 100%.
- 2 Choose a region and select a type of patient. Region is only selected once when building your scenario; it can not be changed once you enter a casualty.
- 3 Enter the type of injury or disease.
- When entering an injury, you have the option to select location and specific location. You may leave these fields blank.
- 5 Select the number or percentage of patients with this injury or disease.
- 6 Click the right arrow to include the patients in the patient stream.
- 7 Repeat steps 2-6 until you have entered 100% of the casualties. Click the *Build* button.
- (8) Click the Choose Output button or click Next on the toolbar.



# **Deleting Casualties From the Patient Stream**

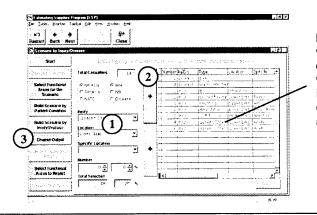
- 1 Select the casualty you want to delete.
- 2 Click the left arrow. Repeat this process for as many casualties as you want.
- (3) When finished, click the *Choose Output* button or click *Next* on the toolbar.



# Increasing a Casualty Type in the Patient Stream

You may enter a number for a particular casualty type and later want to increase it.

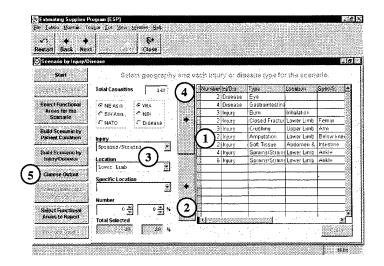
- (1) Re-enter the injury/disease type and location.
- 2 Click the right arrow. Now you have two identical items in the viewing window.
- 3 Click the Choose Output button or click Next on the toolbar.



In this scenario, 4 casualties with a sprained ankle were entered. Next, 6 more casualties with the same wound were included, giving a total of 10 casualties with a sprained ankle.

## **Decreasing a Casualty Type in the Patient Stream**

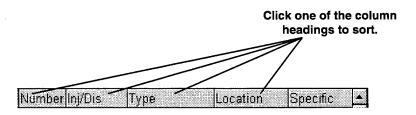
- 1 Select the item you want to decrease.
- (2) Click the left arrow.
- 3 Re-enter the injury/disease type and location with the desired number.
- 4 Click the right arrow to re-enter into the patient stream.
- 5 Click the *Choose Output* button or click *Next* on the toolbar.



## **Sorting the Patient Stream**

ESP gives you the option to sort your patient stream in descending order by number, or in alphabetical order by injury/disease type or location.

To sort, click the column heading by which to sort. You can only sort by one category at a time.





# selecting your output

What Are Reports and Queries?
The Parts of the Choose Output Screen
Selecting the Output
Output That Orders and Subtotals
How to Order and Subtotal Your Output
Deselecting Your Order and Subtotal Choices
Output That Reports on Functional Area
How to Report on Functional Area

## What Are Reports and Queries?

You may **report** on a scenario or **query** the database's information (see Appendix C for sample output).

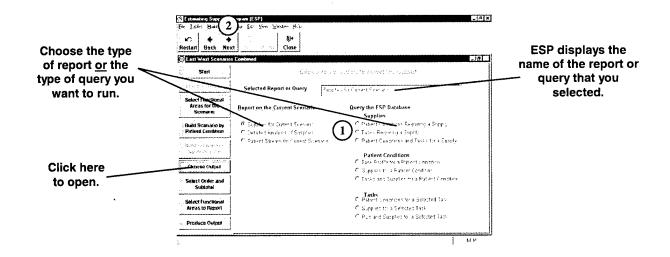
#### Reporting on a Scenario

- ✓ Supplies for Current Scenario generates a list of the supplies needed to treat the scenario's given patient distribution. The list includes weight, cube, and cost information.
- ✓ **Detailed Analysis of Supplies** generates a list of tasks and PCs that require each supply needed to treat the scenario's patient stream. This is an *extremely lengthy* report.
- ✓ Patient Stream for Current Scenario generates the number of patients associated with each PC in the scenario.

#### Querying the Database's Information

- Patient Conditions Requiring a Supply generates a list of the PCs that need the supply you select.
- ✓ **Tasks Requiring a Supply** generates a list of the tasks that use the supply you select.
- ✓ Patient Conditions and Tasks for a Supply generates a list of the PCs and tasks that need the selected supply.
- ✓ Task Profile for a Patient Condition generates a list of the tasks required by the PC you select.
- ✓ Supplies for a Patient Condition generates a list of the supplies required to treat the PC you select.
- ✓ Tasks and Supplies for a Patient Condition generates a list of the tasks and supplies required by the PC you select.
- ✓ Patient Conditions for a Selected Task generates a list of the PCs requiring the task you select.
- ✓ **Supplies for a Selected Task** generates a list of the supplies needed to accomplish the task you select.
- ✓ PCs and Supplies for a Selected Task generates a list of the PCs requiring the task you select and the supplies needed to accomplish that task.

### The Parts of the Choose Output Screen



## **Selecting the Output**

- Select the radio button that corresponds to the report or query you want to run.
- (2) Click *Next* on the toolbar. Each report and query offer different output options. The Select Order and Subtotal screen, the Select Functional Areas to Report screen, or the Produce Output screen opens, depending upon the available options of the output you selected.

When querying the database, you must enter the information relevant to the query in the Produce Output screen. For example, if you select Supplies for a Selected Task, you must enter the task in the Produce Output screen. This is addressed in the next Chapter on page 8-6.

### **Output That Orders and Subtotals**

Many of the ESP reports and queries are organized in a clear, easy-to-read format and generally do not need to be sorted. For example, many of the queries (i.e., Task Profile for a PC, PCs Requiring a Supply) report only one type of information and therefore do not need further organization.

However, three reports and two queries offer Ordering and Subtotaling options. The Ordering option organizes output data alphabetically or numerically, according to your choice. If you want to order by more than one item, ESP sorts the data by the first order item first, the second order item second, and so on. Subtotaling organizes the data by group. When subtotaling, order is modified to subtotal correctly. For example, say you subtotal a Patient Stream for Current Scenario report by category and order it by number of patients. The report groups the patients in descending order within each category, as opposed to a simple list of patients in descending order or a simple grouping of patients by category.

The following is a description of the available Ordering and Subtotaling options.

#### **Supplies for Current Scenario Report**

Ordering options are Supply Description (Nomen); National Stock Number (NSN); Equip, Consumable, Durable; Package Weight; Package Cube; and Package Cost. There are currently no Subtotaling options.

#### **Detailed Analysis of Supplies Report**

Ordering options are Supply Description (Nomen) and NSN. There are currently no Subtotaling options.

#### Patient Stream for the Current Scenario Report

Ordering options are PC and Number of Patients. Subtotaling option is Category.

#### Supplies for a Patient Condition Query

Ordering options are Supply Description (Nomen) and NSN. There are currently no Subtotaling options available.

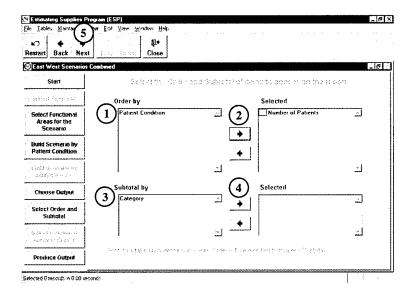
#### Supplies for a Selected Task Query

Ordering options are Supply Description (Nomen) and NSN. There are currently no Subtotaling options available.

### **How to Order and Subtotal Your Output**

#### To Order and/or Subtotal:

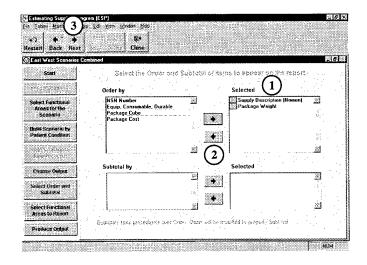
- 1 Click the Order category of your choice.
- 2 Click the right arrow to move your selection to the Selected for Order box.
- 3 Select the Subtotal category of your choice.
- 4 Click the right arrow to move your selection to the Selected for Subtotal area.
- (5) Click *Next* on the toolbar. Either the Select Functional Areas to Report screen or the Produce Output screen opens, depending upon the available options for the output you selected.



**NOTE:** It is possible to operate the Order and Subtotal features independently of one another. If you only want to order, follow Steps 1 and 2. If you only want to Subtotal, follow Steps 3 and 4.

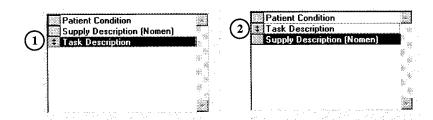
## **Deselecting Your Order and Subtotal Choices**

- 1) Click on the item you wish to deselect.
- (2) Click on the left arrow.
- (3) When finished deselecting, click *Next* on the toolbar. Either the Select Functional Areas to Report screen or the Produce Output screen opens, depending upon the available options for the output you selected.



### TIP: Rearranging Your Order and Subtotal Selections

- 1 Click the little gray box to the left of the item you wish to move. The box shows a double-sided arrow.
- 2 Clicking and holding your mouse down, move the item up or down to the desired position and release the mouse.
- (3) Click Next on the toolbar when finished.



### **Output That Reports on Functional Area**

ESP gives you the option to report on the functional areas of your choice. This comes in handy if, for example, you select four different functional areas for your scenario but only want to see the supplies needed for one of those areas.

# The Select Functional Areas to Report feature is available for the following reports/queries:

- ✓ Supplies for Current Scenario (Report)
- ✓ Task Profile for a Patient Condition (Query)
- ✓ Supplies for a Patient Condition (Query)
- ✓ Tasks and Supplies for a Patient Condition (Query)
- ✓ Patient Conditions for Selected Task (Query)
- ✓ Supplies for Selected Task (Query)
- ✓ PCs and Supplies for a Selected Task (Query)✓ Tasks Requiring a Supply (Query)
- ✓ Patient Conditions Requiring a Supply (Query)
- ✓ PCs and Tasks Requiring a Supply (Query)

There is one thing to keep in mind if you select the Supplies for Current Scenario report and want to report on selected functional areas. Only the functional areas chosen as part of your scenario earlier in the program are available for reporting. In other words, if you select BAS and SC, you do not report on First Responder. This safety feature is designed to prevent the selection of functional areas that don't apply to your scenario.

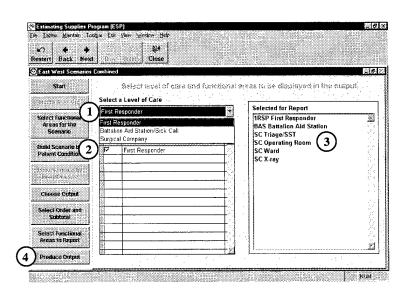
**NOTE:** Reporting on functional area is different from ordering by functional area. If you report on functional area, ESP lists <u>only the information relative to that area</u>. When ordering by functional area, ESP lists the information grouped by <u>each selected functional area</u>.

### **How to Report on Functional Area**

When working in a scenario, the functional areas chosen on the Select Functional Areas for the Scenario screen are automatically selected on the Select Functional Areas to Report screen. When you query the ESP database, there are no pre-selected functional areas on the Select Functional Areas to Report screen. The screen is clear by default.

#### To select/deselect functional areas:

- 1 Click the drop down menu to select the level of care.
- 2 Click the checkboxes of the functional areas you want to report on. If you are deselecting, just click the checkbox of the item you want to deselect.
- 3 View the item in the Selected for Report box to be sure it is selected. If you are deselecting, make sure the item is no longer listed in the Selected for Report box.
- 4 Click the *Produce Output* button or click *Next* on the toolbar.



**NOTE:** You can also deselect the functional areas through the Selected for Report box. Just double-click on the item to delete it.



# viewing your output

ESP Output Options
How to Read the Output
Using Tables When Querying
Providing a PC, Supply, or Task for Your Query
Previewing Your Output
Saving and Sending Your Output as a File via Email
Printing the Output
Choosing a Printer and Selecting Pages to Print

## **ESP Output Options**

You are now ready to view your output. ESP offers several ways to obtain your information.

#### Report Style or Data Style

First, you must choose to view your information in report style or in data style.

Report style shows a FORMATTED version of your information with headings, bolded words, and columns that make the information easier to read. You will probably use report style the most. There are three report style options:

- ✓ ESP Report Format (unavailable for saving)
- ✓ ASCII Text Report (.TXT)–formatted
- ✓ Microsoft Word Document (.DOC)

Data style displays an UNFORMATTED version of your information in a table, a spreadsheet, or separated by commas. Data style files are suitable as input for another program. There are four data style options:

- ✓ Database File (.DBF)
- ✓ ASCII Text File (.TXT)—unformatted
- ✓ Excel Worksheet (.XLS)
- ✓ HTML Table (.HTM)

The column headings used in data files are explained in the ESP System Documentation. Email ESP@NHRC.NAVY.MIL for more information.

#### Preview your output

You can currently preview your report or query in both report and data style.

#### Save your output as a file

When using report style, you can save your output to your hard drive in two different formats:

- ✓ ASCII Text Report (.TXT)—formatted
- ✓ Microsoft Word (.DOC)

When using data style, you can save your output to your hard drive in four different formats:

- ✓ Database File (.DBF)
- ✓ ASCII Text File (.TXT)—unformatted
- ✓ Excel Worksheet (.XLS)
- ✓ HTML Table (. HTM)

#### Send your file via email

You can also send the above files via email. If you use Microsoft Outlook, Outlook Express, Eudora, or MSMail, your mail automatically opens as part of the ESP email function. ESP attaches the saved output file to a new email message and composes a generic memo that describes the contents of the attachment.

#### Print your output

How you print your information varies with output type. You can print directly to your printer in some instances; in others, you must print through another software program. Furthermore, you have the ability to choose a new printer as well as to select certain pages of the report/query to print.

### **How to Read the Output**

Most ESP reports/queries are self-explanatory. However, there are terms and abbreviations that you need to know:

ALOS	Average Length of Stay in hours
EDC	Equipment, Durable, Consumable
Day 1	Number of times a task is performed on day 1
Day 2+	Number of times task is performed each day after day 1
%PTS	Percent of patients who receive a task
QtyUM	Minimum amount of the supply needed to treat
	the patient stream
QtyTot	Quantity of the supply needed for total (Day
	1,Day 2+ and %PTS) doses/uses
QtyPat	Quantity of the supply needed for a single
	dose or use
QtyPkg	Sum quantity of packaging needed to treat
	the patient stream
Patients	Number of patients who need the supply
Units	Unit of packaging
UM	Unit of measure

#### The Qty UM Column

There is a possibility that the supply amount calculated is less than the amount needed to treat one patient. This happens when ESP probabilities dictate that the occurrence of a particular type of casualty is less than 1%. However, the Units column reflects at least one package to ensure that at least one patient can be treated.

#### **Understanding Supplies**

Supplies are consumable items that are used only once and then discarded. Therefore, the quantity listed for a supply varies with the patient stream.

#### **Understanding Equipment**

Equipment items are those items that can be reused; therefore the number of an equipment item does not vary. Equipment quantity reflects the amount of equipment needed to establish one of each functional area.

#### **Understanding Equipment Sets**

Some of the equipment required by BAS, FRS Triage, FRS OR, SC Triage/SST, and SC OR functional areas is issued in sets. The reports and queries list equipment sets by displaying the set name and the number of sets required for that functional area, followed by the nomen and predefined quantity of each item included in that set. The dental and shipboard OR functional areas are also issued equipment in sets. However, these areas are currently under construction.

The following table is a list of the set names and the quantities needed for BAS, FRS Triage, FRS OR, SC Triage/SST, and SC OR functional areas.

<b>Battalion Aid Station</b>	
Chest Tube	4
Central Venous Line	2
Minor Surgical	1
Forward Resuscitative	
Surgery Triage	
Chest Tube	2
Peritoneal Lavage	2
Forward Resuscitative Surgery OR	
Basic OR Equipment	1
Basic Major OR Instrument	3
Extremity Instrument	
Burr Hole Instrument	3
General Anesthesia Equipment	2
Surgical Company Triage/SST	
Minor Surgical	16
Surgical Company OR	
Basic OR Equipment	2
Basic Major OR Instrument	4
Basic Minor Instrument	8
Burr Hole Instrument	1
General Anesthesia Equipment	2

**NOTE:** Although the set names are similar for the FRS and SC ORs, the equipment contained in each set is different.

#### **More About Sets**

To get a list of the equipment items in a particular set, you must first know which tasks correspond to the equipment sets.

#### **BAS**

l ask Z042	Insert Chest Tube
Task 065	Insert Central Venous Lines Large Bore Access
Task 108	Minor Surgical Procedure (Debride/Suture/Incision)

#### **FRS Triage**

Task Z042	Insert Chest Tube
Task Z177	Diagnostic Peritoneal Lavage

#### **FRS OR**

Task ZZ35	Issue Basic Operating Room Equipment
Task ZZ36	Issue Basic Major OR Instrument Set
Task ZZ37	Issue Extremity Instrument Set
Task ZZ38	Issue Burr Hole Instrument Set
Task ZZ39	Issue General Anesthesia Equipment Set

#### SC Triage/SST

Four tasks use the Minor Surgical Set; they are tasks Z042, 065, Z177, 108 (all mentioned above). However, unlike BAS, SC Triage/SST doesn't have individual equipment sets for these tasks. For example, if you select task Z042 Insert Chest Tube, the minor surgical set plus items specific to that task are listed in the query.

#### SC OR

The task numbers for SC OR are the same as FRS OR except for one. In FRS OR, the minor set is named the Extremity Instrument Set (task ZZ37). However, in SC OR, the minor set is named the Basic Minor Equipment Set; therefore use task ZZ44. But remember, although most tasks are the same in both the FRS OR and SC OR, the equipment contained in each set is different.

Using the information above, follow these steps to get a list of the equipment items in a particular set.

- 1 Click Choose Output button. Choose the Supplies for a Selected Task query (page 7-2). Click Next.
- (2) Select Ordering options (page 7-4). Click *Next*.
- (3) Select the functional area that is relevant to the equipment set (page 7-8). For example, if you want a list of the items in the Basic OR Equipment, you must select either FRS OR or SC OR. Click *Next*.
- 4 Select the task of your choice from the drop down menu (page 8-8). Check the Preview output box and click Go.

#### More Than One Type of Supply for a Task

There are also instances when more than one type of supply is available to complete a task. For example, say you are treating PC 149 (Sprain Ankle Closed Acute Grade 2 Incomplete Ligament Rupture). The supplies needed to apply an elastic bandage (task 092) are:

NOMEN	QUANT	UM
BANDAGE ELASTIC COBAN BRN 3"X5YDS 24S	0.50	RL
BANDAGE ELASTIC ACE ROLLED 4"x4.5YDS 12S	0.50	RL

As shown, two equivalent choices for this task exist; however, only one bandage is actually used. To prevent overestimation of supply estimates, probabilities that add up to one are assigned to supplies when there is more than one supply that can be used to do the same task. For example, using the above task and a patient stream of 10, ESP would project 5 of each bandage rather than 10 of each.

**NOTE:** An "S" after a number in the supply's nomen indicates the quantity of that supply in its package (i.e., 24S indicates there are 24 items in one package).

### **Using Tables When Querying**

Not all PCs, tasks, and supplies are applicable to every functional area. This is important when you are querying the ESP database. If you enter a PC, task, or supply that is not applicable to the functional area you selected, an error message opens. You have the option to open a table that displays the valid functional areas for your selection.

For example, say you run the Task Profile for a Patient Condition query for PC 203 and select SC Triage as the functional area for reporting. Because PC203 is not treated by SC, the error message opens to show you the functional areas that do treat PC 203.

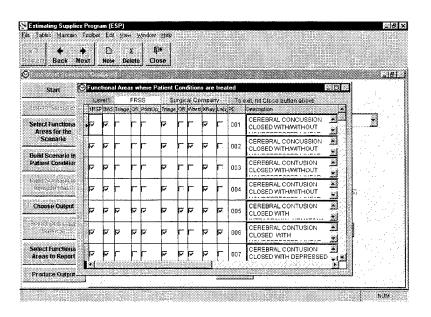
If the error message opens when you are on the Produce Output screen, you must either:

✓ Re-select a functional area that is relevant to the PC, task, or supply (p. 7-8).

or

✓ Re-select a PC, task, or supply that applies to the functional area you select (p. 8-5).

Use the table to determine which PCs, tasks, and supplies are relevant to each functional area. When you are finished with the table, click *Close* on the toolbar.



**NOTE:** You can access these tables at any point through the Tables menu on the menu bar.

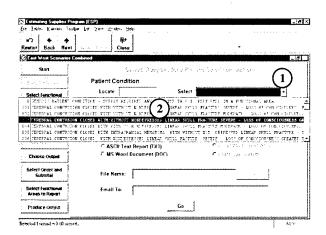
## Providing a PC, Supply, or Task for Your Query

Before choosing the output options for your <u>query</u>, you must provide ESP with the relevant query data in the Produce Output screen (this does not apply when reporting on a scenario).

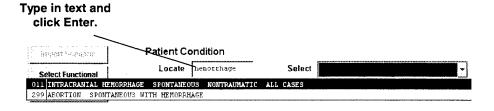
Input	Query Name
PC	Task Profile for a PC
	Supplies for a PC
	Tasks and Supplies for a PC
Task	PCs for a Selected Task
	Supplies for a Selected Task
	PCs and Supplies for a Selected Task
Supply	PCs Requiring a Supply
	Tasks Requiring a Supply
	PCs and Tasks for a Supply

#### To enter the required input:

- 1 Click the drop-down menu.
- 2 Select the PC, task, or supply you want to query.



**NOTE:** To use ESP's searching capabilities for a PC or task, type in text to search by in the box marked Locate and press Enter. For a supply, type in the last four digits of the NSN and press Enter. ESP performs a search to call up the PCs or tasks including that text, or the supplies with the same last four digits. Click the drop-down menu to select your choice.

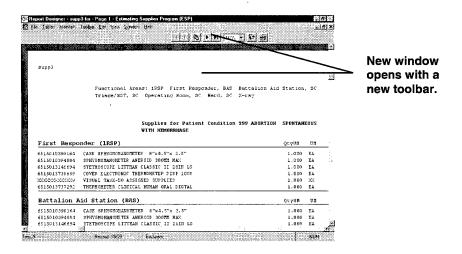


#### **Previewing Your Output**

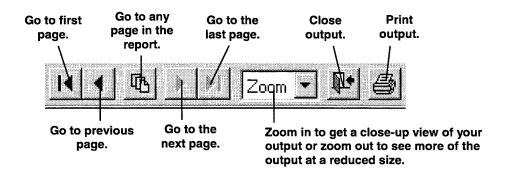
To preview your information, click the Preview output checkbox located near the top of the screen before choosing the type of output.

#### **Previewing in ESP Report Format**

When previewing in ESP report format, that is, when the Print Output radio button is selected, a new window opens to display the output. This ESP document cannot be saved or sent via email.



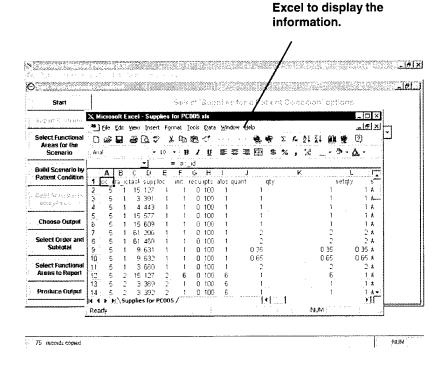
When the new window opens, you have access to a new toolbar. Use this toolbar to move from page to page, to zoom in and out, and to print or close the output.



#### **Previewing Other Files**

ESP automatically opens the software program necessary to view the selected format. When you preview an ASCII text report or a Microsoft Word document, the file opens up in Microsoft Word. Database (.DBF) files are previewed in a table and .XLS files are previewed in Excel. When you preview an HTML table, the data are displayed in a web browser, such as Internet Explorer, and ASCII text files are opened in a simple text window.

For example, when Excel spreadsheet is selected, ESP opens

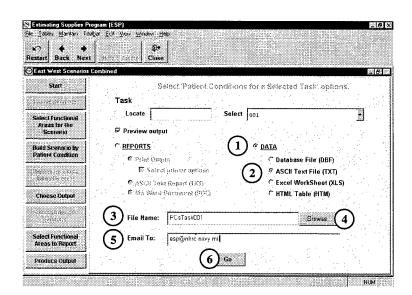


**NOTE:** You must have the software associated with the selected output in order to use the ESP preview function for that file type. For example, without Microsoft Excel, you cannot preview Excel worksheets.

# Saving and Sending Your Output as a File via Email

You can save all the output formats except for the ESP report format.

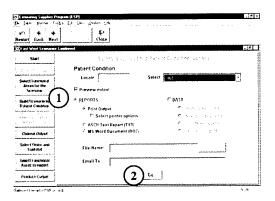
- 1 Click the Reports or Data radio button.
- 2 Click the radio button that corresponds to the type of file to save as (.TXT, .DOC, .DBF, .XLS, or .HTM).
- 3 Type in a file name. The file is saved by default to the folder labeled ESP located on your hard drive (C:\).
- To specify a new file location, click the *Browse* button. A new window opens. Locate the folder you want to save the file in. Type in a file name and click *OK*.
- 5 If you are sending the file via email, click the checkbox that reads Email to: and type in the email address.
- 6 Click Go.
- 7 ESP opens your email software automatically. A new message with the file attached is already composed for you. Type in any additional message and click *Send*.



# **Printing the Output**

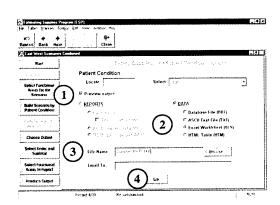
#### **ESP** report format:

- 1 Click the Reports radio button and select the radio button that reads Print Output.
- 2 Click Go. (If the Preview output button is selected, click the printer button on the preview window's toolbar when you are ready to print.)



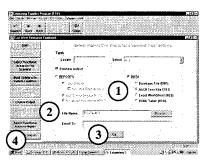
# ASCII text report, Microsoft Word, Excel, or HTML format:

- 1 Click Preview output checkbox.
- Click the radio button corresponding to the type of output you want.
- 3 Type in the file name.
- 4 Click *Go.* A new window opens in Microsoft Word (for ASCII text report and Microsoft Word document), Microsoft Excel (for Excel spreadsheet), or a web browser (for HTML table). Go to the File menu in the application, click print. The print dialog box opens. Click *OK*.

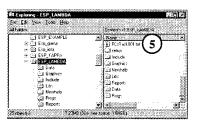


#### .DBF file or ASCII text file:

- Click the radio button that corresponds to the type of format you want.
- 2 Type in the file name.
- 3 Click Go.
- 4 Click the *Start* button located in the lower left corner of your screen. Move your mouse up to the Programs folder. Move your mouse to and click the Windows Explorer icon.



5 Locate your file in Explorer. The file is placed by default in the folder labeled ESP located on your hard drive (C:\). Double-click on the file icon.



6 When the file opens in the new application, go to the File menu and click print.



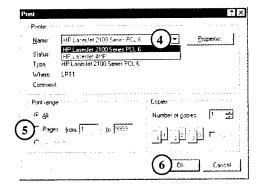
**NOTE:** .DBF files are opened with FoxPro software. If you do not have FoxPro, you can read the .DBF file as a conversion document in Microsoft Excel or Access.

## **Choosing a Printer and Selecting Pages to Print**

Sometimes you may want to choose a different printer or only print certain pages of the report.

#### **ESP report format:**

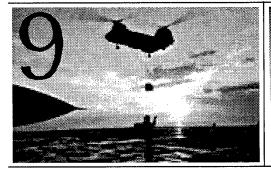
- 1 Click the Reports radio button and Print Output radio button.
- Click the Select printer options checkbox.
- (3) Click Go. If you are previewing your output, click the Printer button on the toolbar when you are ready to print.
- 4 A print dialog box opens. Click the drop-down menu and select a printer.
- To select pages, click the Pages radio button and type in the pages to print.
- 6 Click OK.



# ASCII text report, Microsoft Word, .DBF, Excel, or HTML format:

- 1 Follow steps to print (pages 8-12–8-13), according to file type.
- When print dialog box opens, click the drop-down menu and select a printer.
- To select pages, click the Pages radio button and type in the pages to print.
- 4 Click OK.

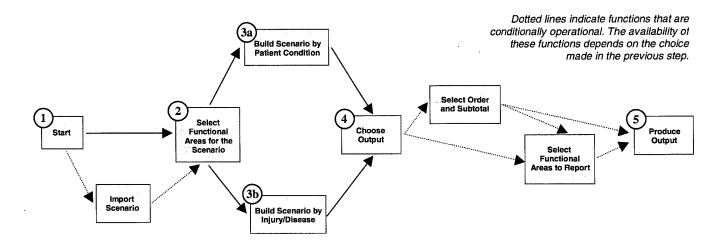
NOTE: This option is not available for ASCII text file.



# quick reference quide

**Program Flow Chart** Quick Step-by-Step Instructions

#### **Program Flow Chart**



#### **Step-by-Step Instructions**

#### (1) Start

- Select one of the following choices:
  - · Use a Listed Scenario
  - Copy a Listed Scenario
  - Build a Scenario by PC
  - Build a Scenario by Injury/Disease
  - Import a Scenario
  - Click Next.

#### If you choose to import a Scenario:

- Click the Browse button. In the new window, double-click the file you want to
- The columns of your file are displayed in the Columns from File box. Click View to display the information contained in these columns (optional).
- Drag the column that corresponds to the PC Code field over to the area labeled Columns for Patient Stream. Next, drag the column that corresponds to the Number of Patients field.
- Click Process
- Click Next.

#### **Select Functional Areas**

- Select level of care from the drop-down
- Select functional area from the checklist by clicking on the checkboxes.
- Click Next

#### (3a)**Build Scenario by PC**

- 2. Enter the number of each PC by typing in the number or using the arrows.
- Click Next.

#### **Build Scenario by** Injury/Disease

- Enter the total number of casualties and select the region.
- Select the type and number of each casualty.
- Click the right arrow.
- After entering all casualties, click Build.
- Click Next.

#### **Choose Output**

- Select output type (report or query).
- Select the report or query you want to run.
- Click Next.

#### There are three reports and two queries that offer ordering and subtotaling options.

- Click an Order item. Click the right arrow.
- Click a Subtotal item. Click the right arrow.
- Click Next.

#### There are nine queries and one report that report on functional area.

- Select the level of care from the drop-down
- Select functional area by clicking the checkboxes.
- Click Next.

#### **Produce Output** (5`

- Select the radio buttons to preview, print, save, and/or email the report/query data.
- If saving or emailing, enter the file name. If emailing, click the "Email to:" checkbox
- and type in the email address.
- Click Go.



### references

- Galarneau MR, Mahoney KJ, Konoske PJ, Emens-Hesslink KE. Development of a Model for Predicting Medical Supply Requirements at the Forward Echelons of Care: Preliminary Findings for Echelon II Laboratory and X-Ray Ancillaries. San Diego, Calif: Naval Health Research Center; 1997. NHRC Tech. Rep. No. 97-3.
- Galarneau MR, Konoske PJ, Emens-Hesslink KE, Pang G, Gauker E. Model for Predicting Medical Supply Requirements at the Forward Echelons of Care: Findings for the Battalion Aid Station. San Diego, Calif: Naval Health Research Center; 1997. NHRC Tech. Rep. No. 97-28.
- Galarneau MR, Konoske PJ, Emens-Hesslink KE, Pang G. Reducing the Logistical Footprint of Forward Resuscitative Surgical Units Using a Patient-Driven Model of Clinical Events. San Diego, Calif: Naval Health Research Center; 1998. NHRC Tech. Rep. No. 98-1.
- Galarneau MR, Pang G, Konoske P, Gauker E. Using a Model of Clinical Events to Determine Supply Requirements for Marine Corps Shock Surgical Team/Triage (SST) and Acute Care Ward Units. San Diego, Calif: Naval Health Research Center: 1998, NHRC Tech. Rep. No. 98-15.
- 5. Emens-Hesslink KE, Galarneau MR, Lowe DJ, Konoske PJ. *Development of a Medical Supply Set for Corpsmen in the Field.* San Diego, Calif: Naval Health Research Center; 1998. NHRC Tech. Rep. No. 98-26.
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- Roberts JE, Emens-Hesslink KE, Konoske PJ. A Descriptive Analysis of Dental Conditions Occurring During Conflicts, Deployments, and Field Training Exercises. San Diego, Calif: Naval Health Research Center; 1999. NHRC Tech. Rep. No. 99-33.



# partiment condition codes

PC	PC DESCRIPTION
100	001 CEREBRAL CONCUSSION CLOSED WITH/WITHOUT NONDEPRESSED LINEAR SKULL FRACTURE SEVERE—LOSS OF CONSCIOUSNESS FROM 2 TO 12 HOURS
005	CEREBRAL CONCUSSION CLOSED WITH/WITHOUT NONDEPRESSED LINEAR SKULL FRACTURE MODERATE—LOSS OF CONSCIOUSNESS LESS THAN 2 HOURS
003	CEREBRAL CONTUSION CLOSED WITHWITHOUT NONDEPRESSED LINEAR SKULL FRACTURE SEVERE—LOSS OF CONSCIOUSNESS GREATER THAN 24 HOURS WITH FOCAL NEUROLOGICAL DEFICIT
004	CEREBRAL CONTUSION CLOSED WITHWITHOUT NONDEPRESSED LINEAR SKULL FRACTURE MODERATE—LOSS OF CONSCIOUSNESS FROM 12-24 HOURS WITHOUT FOCAL NEUROLOGICAL DEFICIT
900	CEREBRAL CONTUSION CLOSED WITH INTRACRANIAL HEMATOMA WITHWITHOUT NON- DEPRESSED LINEAR SKULL FRACTURE— SEVERE - LARGE HEMATOMA (INCLUDING EPIDURAL HEMATOMA) WITH RAPIDLY DETERIORATING COMATOSE PATIENT
900	CEREBRAL CONTUSION CLOSED WITH NONDEPRESSED LINEAR SKULL FACTURE SEVERE—LOSS OF CONSCIOUSNESS GREATER THAN 24 HOURS WITH/WITHOUT FOCAL NEUROLOGICAL DEFICIT
200	CEREBRAL CONTUSION CLOSED WITH DEPRESSED SKULL FRACTURE SEVERE—WITH ASSOCIATED INTRACEREBRAL HEMATOMA AND/OR MASSIVE DEPRESSION
900	CEREBRAL CONTUSION CLOSED WITH DEPRESSED SKULL FRACTURE MODERATE—NO ASSOCIATED HEMATOMA OR SIGNIFICANT EFFECT FROM DEPRESSION
600	CEREBRAL CONTUSION WITH OPEN SKULL FRACTURE SEVERE—WITH INTRACRANIAL FRAGMENTS AND/OR DEPRESSED SKULL FRACTURE; EYELID AND EYEBALL LACERATION WITH RETAINED INTRAOCULAR FOREIGN BODY
010	CEREBRAL CONTUSION WITH OPEN SKULL FRACTURE MODERATE—WITHOUT INTRACRANIAL FRAGMENTS AND/OR DEPRESSED SKULL FRACTURE
011	011 INTRACRANIAL HEMORRHAGE SPONTANEOUS NONTRAUMATIC ALL CASES
012	012 NOT ASSIGNED
013	013 WOUND SCALP OPEN WITHOUT CEREBRAL INJURY OR SKULL FRACTURE SEVERE—SCALPED WITH AVULSION OF TISSUE
014	014 WOUND SCALP OPEN WITHOUT CEREBRAL INJURY OR SKULL FRACTURE MODERATE—SCALP LACERATION
015	015 FRACTURE FACIAL BONES CLOSED EXCLUSIVE OF MANDIBLE SEVERE—MULTIPLE FRACTURES
016	FRACTURE FACIAL BONES CLOSED EXCLUSIVE OF MANDIBLE MODERATE—SINGLE FRACTURE
017	017 WOUND FACE JAWS AND NECK OPEN LACERATED WITH ASSOCIATED FRACTURES EXCLUDING SPINAL FRACTURES SEVERE—WITH AIRWAY OBSTRUCTION

S	PC DESCRIPTION
018	WOUND FACE JAWS AND NECK OPEN LACERATED WITH ASSOCIATED FRACTURES EXCLUDING SPINAL FRACTURES MODERATE—WITHOUT AIRWAY OBSTRUCTION; EYELID AND EYEBALL LACERATION WITH RETAINED INTRAOCULAR FOREIGN BODY
019	
020	-
021	<b>-</b>
022	<del> </del>
023	
025	024 HEARING IMPAIRMENT MODERATE 025 FRACTURE SPINE CLOSED WITHOUT CORD DAMAGE UNSTABLE LESION
026	FRACTURE
027	FRACTURE
028	
620	FRACTURE SPINE OPEN WITH CORD DAMAGE BELOW CERVICAL SPINE (PROGRESSIVE)
031	
032	032 INTERVERTEBRAL DISC DISORDERS WITH NERVE ROOT COMPRESSION RESPONDING TO BED REST/TRACTION
033	
034	
035	BURN THERMAL SUPERFICIAL HEAD AND NECK GREATER THAN 5% BUT LESS THAN 10% OF TOTAL BODY AREA AND/OR EYE INVOLVEMENT
036	
037	BURN THERMAL PARTIAL THICKNESS HEAD AND NECK GREATER THAN 5% BUT LESS THAN 10% OF TOTAL BODY AREA AND/OR SYF INVOLVEMENT
038	
039	BURN THERMAL FULL THICKNESS HEAD AND NECK GREATER THAN 5% BUT LESS THAN 10% OF TOTAL BODY AREA WITH EYE INVOLVEMENT
040	T
140	041 FRACTORE CLAVICLE CLOSED ALL CASES 042 WOLIND SHOLLI DER GIRDI E OPEN WITH RONE IN ILIRY SEVERE JOINT INVOLVEMENT
043	
044	
045	045 WOUND UPPER ARM OPEN PENETRATING LACERATED WITHOUT FRACTURE SEVERE—WITH NERVE AND/OR VASCULAR

PC	PC DESCRIPTION
046	INJURY  046 WOUND UPPER ARM OPEN PENETRATING LACERATED WITHOUT FRACTURE MODERATE—WITHOUT NERVE OR VASCULAR  10.11.15.V.
047	WOUND UPPER ARM OPEN WITH FRACTU
048	
049	FRACTURE RADIUS AND ULNA CLOSED SEVERE—SHAFTS OF BONES FRACTURE RADIUS AND III NA CLOSED MODERATE—COLLES FRACTURE
051	WOUND FOREARM OPEN LACERATED PE
052	
053	-
054	NOI SALVAGEABLE WOUND FOREARM OPEN LACERATED PENETRATING WITH FRACTURE AND WITH NERVE AND VASCULAR INJURY FOREARM
	SALVAGEABLE
055	
056	FRACTURE HAND AND/OR FINGERS CLOSED MODERATE—NOT REQUIRING CLOSED REDUCTION
057	057  WOUND HAND AND/OR FINGERS OPEN LACERATED WITHOUT FRACTURES SEVERE—SUPERFICIAL AND DEEP TENDON   INVOLVEMENT
058	
059	- 1
	CARPALS AND/OR METACARPALS
090	WOUND FINGERS OPEN LACERATED CONTUSED CRUSHED WITH FRACTURE(S) OF PHALANGEALS REQUIRING REHABILITATION
061	CRUSH INJURY UPPER EXTREMITY SEVERE—LIMB NOT SALVAGEABLE
062	-
063	NOT ASSIGNED
000	DISLOCATION SHOULDER CLOSED ALL CASES  DISLOCATION/FRACTURE FI BOW CLOSED ACUTE ALL CASES
990	NOT ASSIGNED
290	
068	
690	
070	AMPUTATION FOREARM TRAUMATIC COMPLETE
071	AMPUTATION FULL ARM TRAUMATIC CON
072	SPRAIN WRIST CLOSED ACUTE ALL CASES

PC DESCRIPTION
073 SPRAIN THUMB CLOSED ACUTE SEVERE 074 SPRAIN FINGERS CLOSED ACUTE MODERATE—NO THUMB INVOLVEMENT
075 BURN THERMAL SUPERFICIAL UPPER EXTREMITIES GREATER THAN 10% BUT LESS THAN 20% OF TOTAL BODY AREA INVOLVED 076 BURN THERMAL SUPERFICIAL UPPER EXTREMITY LESS THAN 10% OF TOTAL BODY AREA INVOLVED
BURN THERMAL
078 BURN THERMAL PARTIAL THICKNESS UPPER EXTREMITY LESS THAN 10% OF TOTAL BODY AREA INVOLVED
079 BURN THERMAL FULL THICKNESS UPPER EXTREMITIES GREATER THAN 10% BUT LESS THAN 20% OF TOTAL BODY AREA INVOLVED
080 BURN THERMAL FULL THICKNESS UPPER EXTREMITY LESS THAN 10% OF TOTAL BODY AREA INVOLVED
082 FFRACTORE RIB(S) CLOSED MODERATE
083 INJURY LUNG CLUSED (BLAST CHUSH) WITH PNEUMOHEMOTHURAX SEVERE—ONE LUNG WITH PULMONART CONTUSION AND ACOUTE SEVERE RESPIRATORY DISTRESS
084 INJURY LUNG CLOSED (BLAST CRUSH) WITH PNEUMOHEMOTHORAX MODERATE—ONE LUNG WITH PULMONARY CONTUSION
085 WOUND THORAX (ANTERIOR OR POSTERIOR) OPEN SUPERFICIAL LACERATED CONTUSED ABRADED AVULSED REQUIRING MAJOR DEBRIDEMENT
086 WOUND THORAX (ANTERIOR OR POSTERIOR) OPEN SUPERFICIAL LACERATED CONTUSED ABRADED AVULSED NOT REQUIRING MAJOR DEBRIDEMENT
087 WOUND THORAX (ANTERIOR OR POSTERIOR) OPEN PENETRATING WITH ASSOCIATED RIB FRACTURES AND
PNEUMOHEMOTHORAX ACUTE SEVERE F
088 WOUND THORAX (ANTERIOR OR POSTERIOR) OPEN PENETRATING WITH ASSOCIATED RIB FRACTURES AND PROPERATE RESPIRATORY DISTRESS
089 NOT ASSIGNED
090 BURN THERMAL SUPERFICIAL TRUNK GREATER THAN 20% BUT LESS THAN 30% OF TOTAL BODY AREA INVOLVED
091 BURN THERMAL SUPERFICIAL TRUNK GREATER THAN 10% BUT LESS THAN 20% OF TOTAL BODY AREA INVOLVED
092 BURN THERMAL PARTIAL THICKNESS TRUNK GREATER THAN 20% BUT LESS THAN 30% OF TOTAL BODY AREA INVOLVED 003 BURN THERMAL PARTIAL THICKNESS TRUNK GREATER THAN 10% BUT LESS THAN 20% OF TOTAL BODY AREA INVOLVED
094 BURN THERMAL FULL THICKNESS TRUNK GREATER THAN 20% BUT LESS THAN 30% OF TOTAL BODY AREA INVOLVED
095 BURN THERMAL FULL THICKNESS TRUNK GREATER THAN 10% BUT LESS THAN 20% OF TOTAL BODY AREA INVOLVED
096 WOUND ABDOMINAL WALL (ANTERIOR OR POSTERIOR) LACERATED ABRADED CONTUSED AVULSED WITHOUT ENTERING
097 WOUNDIAND MALL (ANTERIOR OR POSTERIOR) LACERATED ABRADED CONTUSED AVULSED WITHOUT ENTERING
וכ
099 WOUND LIVER CLOSED ACUTE (CRUSH FRACTURE) MINOR LIVER DAMAGE

PC   PC DESCRIPTION
100 WOUND SPLEEN CLOSED ACUTE (CRUSH FRACTURE) ALL CASES
101 WOUND ABDOMINAL CAVITY OPEN WITH LACERATING PENETRATING PERFORATING WOUND TO THE LARGE BOWEL
102 WOUND ABDOMINAL CAVITY OPEN WITH LACERATING PENETRATING PERFORATING WOUND TO SMALL BOWEL WITHOUT MAJOR OR MULTIPLE RESECTIONS
103 WOUND ABDOMINAL CAVITY OPEN WITH PENETRATING PERFORATING WOUND OF LIVER MAJOR DAMAGE
1 1
WOUND
106 WOUND ABDOMINAL CAVITY OPEN WITH LACERATED PENETRATED PREFORATED WOUND WITH SHATTERED KIDNEY
107 WOUND ABDOMINAL CAVITY OPEN WITH LACERATED PENETRATING PERFORATING WOUND WITH LACERATED KIDNEY INVITION Y REPAIRED RIT SURSFOLIENT NEPHRECTOMY
108 WOUND ABDOMINAL CAVITY OPEN WITH LACERATED PENETRATING PERFORATING WOUND WITH SHATTERED BLADDER
109 WOUND ABDOMINAL CAVITY OPEN WITH LACERATED PENETRATING PERFORATING WOUND WITH LACERATED BLADDER
110 WOUND BUTTOCKS SEVERE—OPEN LACERATED PENETRATING PERFORATING AND AVULSED
111 WOUND BUTTOCKS MODERATE—OPEN LACERATED CONTUSED AND ABRADED
112 DISPLACED FRACTURE OF PELVIS CLOSED WITH ASSOCIATED SOFT TISSUE DAMAGE AND PELVIC ORGAN DAMAGE
113 NON-DISPLACED FRACTURE OF PELVIS CLOSED WITH ASSOCIATED SOFT TISSUE DAMAGE
114 WOUND ABDOMEN OPEN WITH PELVIC FRACTURE AND PENETRATING PERFORATING WOUNDS TO MULTIPLE PELVIC
STRUCTURES (MALE OR FEMALE)
115 WOUND ABDOMEN OPEN WITH PELVIC FRACTURE AND PENETRATING PERFORATING WOUNDS TO PELVIC COLON ONLY (MALE
116 WOUND EXTERNAL GENITALIA MALE SEVERE—LACERATED AVULSED CRUSHED
117 WOUND EXTERNAL GENITALIA MALE MODERATE—ABRADED AND CONTUSED
118 WOUND EXTERNAL GENITALIA FEMALE SEVERE—LACERATED AVULSED CRUSHED
119 WOUND EXTERNAL GENITALIA FEMALE MODERATE—ABRADED CONTUSED
120 FRACTURE CLOSED FEMUR SHAFT ALL CASES
121 WOUND THIGH OPEN WITHOUT FRACTURE NERVE OR VASCULAR INJURY REQUIRING MAJOR DEBRIDEMENT
122 WOUND THIGH OPEN WITHOUT FRACTURE NERVE OR VASCULAR INJURY NOT REQUIRING MAJOR DEBRIDEMENT
SALVAGEABLE
124 WOUND THIGH OPEN LACERATED PENETRATING PERFORATING WITH FRACTURE AND NERVE AND/OR VASCULAR INJURY
LIMB SALVAGEABLE
125 WOUND KNEE OPEN LACERATED PENETRATING PERFORATING WITH JOINT SPACE PENETRATION SHATTERED KNEE  126 WOUND KNEE OPEN LACERATED PENETRATING PERFORATING WITH JOINT SPACE PENETRATION ARTICULAR CARTILAGE
DAMAGE NO BONE INJURY
128 WOUND LOWER LEG OPEN LACERATED PENETRATING PERFORATING WITHOUT FRACTURES REQUIRING MAJOR DEBRIDEMENT

70	PCDESCRIPTION
	WOUND LOWER LEG OPEN LACERATED PENETRATING PERFORATING WITHOUT FRACTURES NOT REQUIRING MAJOR DEBRIDEMENT
130 N N	FR LEG OPEN LACERATED I
131 N	WOUND LOWER LEG OPEN LACERATED PENETRATING PERFORATING WITH FRACTURE AND NERVE AND/OR VASCULAR INJURY LIMB SALVAGEABLE
132 F	FRACTURE ANKLE/FOOT CLOSED DISPLACED REQUIRING REDUCTION
133 F	FRACTURE ANKLE/FOOT CLOSED NONDISPLACED NOT REQUIRING REDUCTION
134 W	WOUND ANKLE FOOT TOES OPEN LACERATED CONTUSED WITHOUT FRACTURES BUT REQUIRING MAJOR DEBRIDEMENT
136	WOUND ANKLE FOOT TOES OPEN PENETRATING PERFORATING WITH FRACTURES AND NERVE/VASCULAR INJURY LIMB NOT SALVAGEABLE
137 W	WOUND ANKLE FOOT TOES OPEN PENETRATING PERFORATING WITH FRACTURES AND NERVE AND/OR VASCULAR INJURY
700	CHIND SALVACEABLE
139	139 CRUSH INJURY LOWER EXTREMITY LIMB SALVAGEABLE
140 D	140 DISLOCATION HIP CLOSED ACUTE ALL CASES
141 T	TEAR LIGAMENTS KNEE ACUTE COMPLETE RUPTURE
142 T	TEAR LIGAMENTS KNEE ACUTE INCOMPLETE RUPTURE
143 D	DISLOCATION TOES CLOSED ACUTE ALL CASES
144 A	AMPUTATION FOOT TRAUMATIC COMPLETE ALL CASES
145 A	AMPUTATION BELOW KNEE TRAUMATIC COMPLETE ALL CASES
	AMPUTATION TRAUMATIC COMPLETE REQUIRING HIP DISARTICULATION
147 A	AMPUTATION ABOVE KNEE TRAUMATIC COMPLETE
-	SPRAIN ANKLE CLOSED ACUTE WITH COMPLETE LIGAMENT RUPTURE
149 S	SPRAIN ANKLE CLOSED ACUTE GRADE 2 INCOMPLETE LIGAMENT RUPTURE
150 B	BURN THERMAL SUPERFICIAL LOWER EXTREMITIES AND GENITALIA GREATER THAN 30% BUT LESS THAN 40% OF TOTAL BODY ARFA INVOLVED
151 B	BURN THERMAL SUPERFICIAL LOWER EXTREMITY AND GENITALIA GREATER THAN 15% BUT LESS THAN 30% OF TOTAL BODY
<u> </u>	AREA INVOLVED
152 B	BURN THERMAL PARTIAL THICKNESS LOWER EXTREMITIES AND GENITALIA GREATER THAN 30% BUT LESS THAN 40% OF TOTAL RODY AREA INVOLVED.
153 B	BURN THERMAL PARTIAL THICKNESS LOWER EXTREMITY AND GENITALIA GREATER THAN 15% BUT LESS THAN 30% OF TOTAL
В	BODY AREA INVOLVED
154 B	BÜRN THERMAL FULL THICKNESS LOWER EXTREMITIES AND GENITALIA GREATER THAN 30% BUT LESS THAN 40% OF TOTAL
155 B	BODT AREA INVOLVED BURN THERMAL FULL THICKNESS LOWER EXTREMITY AND GENITALIA GREATER THAN 15% BUT LESS THAN 30% OF TOTAL

BODY AREA INVOLVED  156 BLISTERS HAND FINGERS FOOT TOES DUE TO FRICTION ACUTE MODERATE—ALL CASES  157 INSECT BITES AND STINGS (UNSPECIFIED BODY AREA) WITH SYSTEMIC SYMPTOMS AND/OR RESPIRATORY DIFFICULTY  158 BITES AND STINGS (UNSPECIFIED BODY AREA) MODERATE—LOCALIZED SYMPTOMS	
INSECT BITES AND STINGS (UNSPECIFIED BITES AND STINGS (UNSPECIFIED BODY A	DERATE—ALL CASES
BITES AND STINGS (UNSPECIFIED BODY A	SYMPTOMS AND/OR RESPIRATORY DIFFICULTY
160 MIW BRAIN AND CHEST WITH SLICKING CHEST WOLIND AND BNELIMOHEMOTHORAX	SYMPTOMS
	COLON
	KIDNEY
MIW BRAIN AND ABDOMEN WITH PENETRATING PERFORATING WOUND BLADDER	
MIW BRAIN AND ABDOMEN WITH SHOCK AND PENETRATING PERFORATING WOUND	ING WOUND SPLEEN
164 IMIW BRAIN AND ABDOINEN WITH SHOCK AND PENETHALING PENFORALING WOOND LIVER 165 IMIW BRAIN AND LOWER LIMBS REQUIRING BILATERAL ABOVE KNEF AMPLITATIONS	ITATIONS
	ATING WOUND COLON
	ATING PERFORATING WOUND KIDNEY
	ATING PERFORATING WOUND SPLEEN
	ATING PERFORATING WOUND LIVER
171 MIW CHEST WITH PNEUMOHEMOTHORAX AND LIMBS WITH FRACTURE AND VASCULAR INJURY	ND VASCULAR INJURY
172 MIW ABDOMEN WITH PENETRATING PERFORATING WOUND OF COLON AND BLADDER	AND BLADDER
173 MIW ABDOMEN WITH PENETRATING PERFORATING WOUND OF COLON AND SPLEEN	AND SPLEEN
174 MIW ABDOMEN WITH PENETRATING PERFORATING WOUND OF COLON AND LIVER	AND LIVER
175 MIW ABDOMEN AND LIMBS WITH PENETRATING PERFORATING WOUND OF COLON AND OPEN FRACTURE AND NEUROVASCULAR	OF COLON AND OPEN FRACTURE AND NEUROVASCULAR
INJURY OF SALVAGEABLE LOWER LIMB	OF LIVED AND KIDNIEV
176 MIW ABDOMEN AND PELVIS WITH PENETRATING PERFORATING WOUND OF LIVER AND RIDINEY	OF LIVER AND RIDNEY
17/ MIW ABDOMEN AND PELVIS WITH PENETHALING PERFORATING WOONDS OF SPLEEN AND BLADDER 178 MIW ABDOMEN PELVIS LIMBS WITH FRACTURE AND NEUROVASCULAR INJURY LIMB SALVAGEABLE AND PENETRATING WOUND	INJURY LIMB SALVAGEABLE AND PENETRATING WOUND
KIDNEY	
179 MIW ABDOMEN PELVIS LIMBS WITHOUT FRACTURE OR NEUROVASCULAR INJURY AND BLADDER	FRACTURE OR NEUROVASCULAR INJURY AND PENETRATING PERFORATING WOUND
OMEN AND LOWER LIMBS WITH	FRACTURE AND NERVE INJURY WITH PENETRATING WOUND OF SPLEEN WITH FULL
181 MIW ABDOMEN AND LIMBS WITHOUT FRACTURE OR NERVE INJURY WITH PENETRATING WOUND OF LIVER	TH PENETRATING WOUND OF LIVER
MIW CHEST WITH PNEUMOHEMOTHORAX	SOFT TISSUE INJURY TO UPPER LIMBS AND PENETRATING WOUND OF BRAIN
	SOFT TISSUE INJURY TO UPPER LIMBS AND ABDOMEN WITH WOUND OF COLON
184 MIW CHEST WITH PNEUMOHEMOTHORAX PELVIS AND ABDOMEN WITH WOUND OF COLON AND BLADDER	WOUND OF COLON AND BLADDER
	TISSUE
187 TRENCH FOOT IMMERSION FOOT SEVERE—VESICLE FORMATION	

PC	PC DESCRIPTION
188	TRENCH FOOT IMMERSION FOOT MODERATE—NO VESICLE FORMATION
189	NOT ASSIGNED
190	FROSTBITE FULL SKIN THICKNESS OR DEE
191	FROSTBITE LESS THAN FULL SKIN THICKNESS
192	192 HYPOTHERMIA ALL CASES
193	193 HEAT STROKE
194	194 HEAT EXHAUSTION
195	HEAT CRAMPS ALL CASES
196	APPENDICITIS ACUTE WITH PERFORATION RUPTURE PERITONITIS
197	
198	INGUINAL HERNIA COMPLICATED DIRECT OR INDIRECT SLIDING INCARCERATION OF BOWEL
199	INGUINAL HERNIA UNCOMPLICATED DIRECT OR INDIRECT NO SLIDING NO INCARCERATION OF BOWEL OR BLADDER
200	INTERNAL DERANGEMENT OF KNEE CHRONIC WITH TORN MENISCUS AND/OR LIGAMENT LAXITY
201	STRAIN LUMBOSACRAL SACROILIAC JOINT CHRONIC ALL CASES
202	ECZEMA DERMATITIS SEBORRHEIC CONTACT OTHERS AFFECTING WEIGHT BEARING OR PRESSURE AREAS
203	ECZEMA DERMATITIS SEBORRHEIC CONTACT OTHERS NOT AFFECTING WEIGHT BEARING AREAS
204	
205	BOILS FURUNCLES PYODERMA ALL OTHER CASES CALLUSES CORNS FOLLICULITIS ERYTHRASMA
206	206 CELLULITIS INVOLVING FACE OR WEIGHT BEARING AREAS
207	207 CELLULITIS OTHER THAN FACE OR WEIGHT BEARING AREAS
208	DERMATOPHYTOSIS SEVERE—AFFECTING
209	209 DERMATOPHYTOSIS ALL OTHER CASES (TINEAS/CANDIDAS/YEASTS)
210	PEDICULOSIS ALL CASES
211	SCABIES ALL CASES
212	PILONIDAL CYST/ABSCESS REQUIRING MAJOR EXCISION
213	CYST/ABSCESS ALLCASES INCLUDING MINOR INCISION
214	214 INGROWN TOENAILS BILATERAL WITH SECONDARY INFECTIONS UNRESOLVABLE AT ECHELON 2
215	INGROWN TOENAILS WITHOUT SECONDAF
216	HERPES SIMPLEX AND ZOSTER WITHOUT ENCEPHALITIS ALL TYPES OF VIRAL DERMATITIS
217	NOT ASSIGNED
218	NOT ASSIGNED
219	HYPERHIDROSIS ALL CASES
220	BLEPHARITIS ALL CASES
221	CONJUNCTIVITIS SEVERE—ALL CASES
222	CONJUNCTIVITIS MODERATE—ALL CASES
223	CORNEAL ULCER

PC DESCRIPTION
224 CORNEAL ABRASION
225 IRIDOCYCLITIS ACUTE MARKED VISUAL IMPAIRMENT
226 IRIDOCYCLITIS ACUTE MINIMAL VISUAL IMPAIRMENT
230 OTITIS MEDIA ACUTE SUPPURATIVE INCLUDING EUSTACIAN TUBES
231 MASTOIDITIS CHRONIC ALL CASES
232 INFECTIONS OF THE NOSE & PARANASAL SINUSES INCLUDING VIRAL RHINITIS
233 UPPER RESPIRATORY INFECTIONS ACUTE ALL CASES
234 BRONCHITIS ACUTE ALL CASES
235 ASTHMA WITH DISABLING SYMPTOMS OR REPEATED ATTACKS
236 ASTHMA OTHER CASES
237 NOT ASSIGNED
238 NOT ASSIGNED
239 ACUTE RESPIRATORY DISEASE SEVERE
240 ACUTE RESPIRATORY DISEASE MODERATE
241 NOT ASSIGNED
242 NOT ASSIGNED
243 FOOD POISONING ALL ORGANISMS DISABLING SYMPTOMS
244 FOOD POISONING ALL ORGANISMS MODERATE SYMPTOMS
245 DIARRHEAL DISEASE SEVERE
246 DIARRHEAL DISEASE MODERATE
247 NOT ASSIGNED
248 GASTRITIS ACUTE ALL CASES
250 PEPTIC ULCER GASTRIC OR DUODENAL UNCOMPLICATED
251 REGIONAL ILEITIS DISABLING SYMPTOMS UNRESPONSIVE TO TREATMENT
252 REGIONAL ILEITIS RESPONDS TO TREATMENT
253 HELMINTHIC DISEASE INCLUDING TRICHINOSIS ASCARIASIS GIARDIASIS TAPEWORM HOOKWORM PINWORM
254 NOT ASSIGNED
255 MIGRAINE ALL CASES
256 HEMORRHOIDAL DISEASE ALL CASES
257 NOT ASSIGNED
259 ISCHEMIC HEART DISEASE

NOITGIBORGE	NOL
PHI FRITIS DEEP VEIN INVOI VEMENT	
-	
262 TENOSYNOVITIS TENDONITIS BURSISTIS EPICONDYLITIS	•
263 MENINGO-ENCEPHALITIS UNCOMPLICATED	
264 MENINGO-ENCEPHALITIS COMPLICATED	
265 NEAR DROWNING WITHOUT CERVICAL SPINE INJURY OR HYPOTHERMIA ALL CASES	IIA ALL CASES
266 TOXIC INHALATION INCLUDING BURN-RELATED RESPIRATORY INJURIES SEVERE—ALL CASES	ES SEVERE—ALL CASES
	CHOOK THE ACCET WOLL
268 WHITE PHOSPHORUS BURNS RESULTANI PARTIAL I HICKNESS BURNS < 40% 185A ALL CASES	S < 40% I BSA ALL CASES
269 SEXUALLY TRANSMITTED DISEASE, NSU, MACUPURULEN I, CEHVICI I IS, I HICOMONAS	S, I HICOMONAS
270 SEXUALLY TRANSMITTED DISEASE, GENITAL ULCERS, ADENOPATHY, CHANCROID, GENITAL HERPES SIMPLEX, I SAMPLOGRANI II OMA VENERELIEM SYPHILLS.	CHANCROID, GENITAL HERPES SIMPLEX,
271 SEXUALLY TRANSMITTED DISEASE, GONORRHEA, CHLAMYDIA, SEPTIC ARTHRITIS, PID	ARTHRITIS, PID
1	
-	
276 NEPHROTIC SYNDROME/RENAL FAILURE ALL CASES	
277 RENAL/URETERAL CALCULUS CAUSING OBSTRUCTION IMPACTED	The state of the s
278 RENAL/URETERAL CALCULUS NOT CAUSING OBSTRUCTION	
279 EPIDIDYMITIS, CYSTITIS, PROSTATITIS, ORCHITIS, INCLUDING TESTICULAR TORSION, ALL CASES	ULAR TORSION, ALL CASES
280 BALANOPOSTHITIS ALL CASES	
281 NOT ASSIGNED	The state of the s
282 INFECTIOUS MONONUCLEOSIS ALL CASES	terrete de la constante de la
283 HEPATITIS INFECTIOUS VIRAL ALL CASES	
284 NOT ASSIGNED	
285 CHOLECYSTITIS ACUTE WITH STONES/CHOLECYSTITIS ALL CASES	
286 PANCREATITIS ACUTE ALL CASES	The state of the s
287 CIRRHOSIS ALL CASES	The state of the s
288 NOT ASSIGNED	
289 NEOPLASMS MALIGNANT	
290 NEOPLASMS BENIGN	
291 ABNORMAL UTERINE BLEEDING	
+	
293 PELVIC INFLAMMATORY DISEASE (PID) ALL CASES	
294 CERVICITIS ENDOCERVICITIS WITH SYMPTOMATIC LEUKORRHEA	to change the second se

PC PC DESCRIPTION
295 VULVOVAGINITIS
296 NOT ASSIGNED
297 TUBAL PREGNANCY ALL CASES
298 NOT ASSIGNED
299 ABORTION SPONTANEOUS WITH HEMORRHAGE
300 NOT ASSIGNED
301 PSYCHOSIS
302 CONDUCT DISORDERS
304 STRESS REACTION SEVERE UNSTABLE SLOW IMPROVEMENT
305 STRESS REACTION SEVERE STABLE SLOW IMPROVEMENT
306 ALCOHOL DEPENDENCY SYNDROME MODERATE
_
309 DRUG MISUSE (OTHER THAN ALCOHOL) MILD OR MODERATE
311 EYE WOUND LACERATED PENETRATED WITH RETINAL INJURY EYE SALVAGEABLE
CARTILAGE INJURY
313 WOUND ABDOMINAL CAVITY OPEN WITH LACERATED PENETRATING PERFORATING WOUND KIDNEY MODERATE—KIDNEY
SALVAGEABLE
STRESS REACTION SEVERE UNSTABLE
STRESS REACTION SEVERE UNSTABLE F
316 ALCOHOL DEPENDENCY SEVERE—IMPENDING OR ACTUAL DTS
317 DRUG MISUSE (OTHER THAN ALCOHOL) SEVERE—ATYPICAL NO DEPENDENCY
318 STRESS REACTION SEVERE—RAPID IMPROVEMENT
319 WOUND FINGERS OPEN LACERATED CONTUSED CRUSHED WITH FRACTURE(S) OF PHALANGEALS NOT REQUIRING
REHABILITATION
320 DISLOCATION/SUBLUXATION LEMPOROMANDIBULAR JOINT WITHOUT FRACTURE CHRONIC REGULING CORRECTION 331 DISLOCATION/SUBLITATION TEMPOROMANDIBILIAR JOINT WITHOUT FRACTURE ACUTE INITIAL INJURY
FRACTURE MANDIBLE WITH/WITHOUT OF
323 FRACTURE MANDIBLE WITHWITHOUT ORAL LACERATION WITHOUT AIRWAY INVOLVEMENT MILD DISPLACEMENT STABLE
SEVERE STABLE—DE
325 STRESS REACTION SEVERE STABLE PERSISTING
326 NOT ASSIGNED
327 NOT ASSIGNED

8	
) acc	ANIMAI BITES AND BABIES EXPOSIBE
070	TOACHOMA ALL CARES
330	SCHISTOCOMIASIS ALL CASES
331	
332	
333	FEBRILE ILLNESS ACUTE SEVERE—EXCEPT MALARIA AND PNEUMONIA
334	FEBRILE ILLNESS ACUTE MODERATE
335	SNAKE BITE
336	NOT ASSIGNED
337	NOT ASSIGNED
338	NOT ASSIGNED
339	CUTANEOUS ULCERS INCLUDING LEISHMANIASIS
340	340 NOT ASSIGNED
341	NOT ASSIGNED
342	NOT ASSIGNED
343	NOT ASSIGNED
344	NOT ASSIGNED
345	345 NOT ASSIGNED
346	EYE WOUND DIRECTED ENERGY INDUCED (LASER) SEVERE OF MACULA AND/OR OPTIC NERVE, WITH VITREOUS BLOOD, SEVERE VISUAL LOSE. ONE OR BOTH EYES
347	
348	
349	
350	+=
	CHEMICAL BIOLOGICAL RADIOLOGICAL:
352	ANTHRAX, INHALATION, NON-VACCINALED, INCUBATING, ASYMPTOMATIC ANTHRAX, INHALATION, NON-VACCINATED, PRODROMAL
353	ANTHRAX, INHALATION, NON-VACCINATED, ACUTE
354	ANTHRAX, INHALATION, VACCINATED, ASYMPTOMATIC
355	
326	ANTHRAX, INHALATION, VACCIIVALED, ACUTE

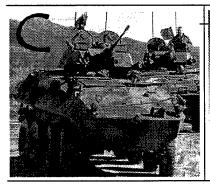
<sup>1</sup> Vaccinated assumes received at least three doses of vaccine for anthrax and is up to date on vaccine/booster schedule

PLAGUE, INHALATION, INCUBATING, ASYM PLAGUE, INHALATION, ACUTE PLAGUE MENINGITIS BOTULISM WITH RESPIRATORY FAILURE BOTULISM WITH RESPIRATORY FAILURE BOTULISM WITHOUT RESPIRATORY FAILURE STAPHYLOCOCCAL ENTEROTOXIN B WITH STAPHYLOCOCCAL ENTEROTOXIN B WITH SMALL POX, INCUBATING, ASYMPTOMATIC SMALLPOX, SYMPTOMATIC TULAREMIA, INHALATION, INCUBATING, ASYMPTOMATIC SMALLPOX, SYMPTOMATIC TULAREMIA, INHALATION OFEVER, INHALATION OFEVER, INHALATION NERVE AGENT VAPOR ONLY (INHALATION NERVE AGENT VAPOR SEVERE NERVE AGENT LIQUID MODERATE NERVE AGENT LIQUID MODERATE NERVE AGENT LIQUID MODERATE NERVE AGENT LIQUID SEVERE WOUND, LOWER LEG, OPEN, LACERATED MODERATELY CONTAMINATED WITH LIQUID NERVE AGENT COMBINED PENETRATING MUSTARD LIQUID/VAPOR MILD MUSTARD LIQUID/VAPOR MODERATE MUSTARD LIQUID/VAPOR MULD PHOSGENE OXIME CYANIDE (AC) INHALATION MILD CYANIDE (AC) INHALATION SEVERE
398 PULMONARY AGENT WITH EARLY (<4HOURS) SYMPTOMS 399 PULMONARY AGENT WITH DELAYED (>4 HOURS) SYMPTOMS 400 ANTICHOLINERGIC INCAPACITATING AGENT 401 WHITE PHOSPHORUS INJURY, SKIN EXPOSURE

501 WATER SANITATION 502 PEST CONTROL 503 LEAT COLOUR BEAT COLOUR	
501 WATER SANITATION 502 PEST CONTROL	
502 PEST CONTROL	
INCITATION IN IN IN IN DECICENTION	
SUS NEAL/COLD INSONT PREVENTION	
504 INFECTITOUS DISEASE PREVENTION	
505 FOOD SANITATION	
506 COMMON AREA SANITATION	
507 BERTHING AREA SANITATION	
508 WASTE MANAGEMENT	
509 FORCE TRAINING	
510 HEARING CONSERVATION	
SHIPBOARD INJURY:	
600 HYPHEMA ALL CASES	
601 VERRUCA, PLANTAR WARTS, ANAL, GENITAL CONDYLOMAS	AL CONDYLOMAS
602 COMMON DERMATITIS—PURITIS, UTICARIA	
603 SMOKE INHALATION	
604 ELECTRICAL SHOCK	
605 ARTHRISTIS	
606 CONSTIPATION, FECAL IMPACTION	
607 MOTION SICKNESS, VERTIGO	
608 GASTROENTERITIS	
609 STROKE	
610 DIABETES	
612 RICKETTSIAL DISEASE INCLUDING ROCKY M	MOUNTAIN SPOOTED FEVER, SSCRUB TYPHUS
613 POISONING, INCLUDING INGESTION, INHALATION, CONTACT	ATION, CONTACT
614 DECOMPRESSION SICKNESS	
615 SYNCOPE, VASOVAGAL	The State of Property of the Control
616 AIRCRAFT ACCIDENT (COLLECT BLOOD, URINE SAMPLES ONLY)	RINE SAMPLES ONLY)
800 ACUTE NECROTIZING GINGIVITIS (ANUG)—A ULCERATION OF THE GINGIVAL MARGINS. A	-AN INFLAMMATION OF THE GINGIVA CHARACTERIZED BY NECROSIS OF THE PAPILLAE, APPEABANCE OF A PSEUDOMEMBRANE, PAIN, AND A FETID MOUTH ODOR
801 ALVEOLITIS/ALVEOLAR OSTEITIS (LOCALIZE	ALVEOLITIS/ALVEOLAR OSTEITIS (LOCALIZED)—INFECTION OF AN EXTRACTION SITE (DRY SOCKET, LOCALIZED OSTEITIS)
802 APICAL ABSCESS/PERIAPICAL ABSCESS—CO	APICAL ABSCESS/PERIAPICAL ABSCESS—COLLECTION OF PURULENT EXUDATE AROUND THE AREA OF THE TOOTH THAT

PC DESCRIPTION
SURROUNDS THE ROOT TIP  803 AVULSED, MOBILE, DISPLACED TOOTH—SEPARATION OR DISPLACEMENT OF AN ENTIRE TOOTH STRUCTURE FROM ITS SLIPPORTING AND ATTACHING TISSUES
804 CANDIDIASIS—FUNGAL INFECTION 805 CARIES NO PULP INVOLVEMENT—DETERIORATION OF ENAMEL BY DECAY THAT DOES NOT EXTEND TO THE PULP
806 CARIES PULP INVOLVEMENT—DETERIORATION OF ENAMEL BY DECAY THAT EXTENDS TO THE PULP 807 CELLILITIS—INFLAMMATION OF THE SLIBCLITANFOLIS TISSLIF CALISED BY GROLIP A BETA HEMOLYTIC STREPTOCOCCI
809 CROWN BROKEN/MISSING—BROKEN OR FRACTURE OF TOOTH CAP 810 DEFECTIVE RESTORATION—DETERIORATION, FRACTURE, OR LOSS OF PERMANENT OR TEMPORARY NON-CAST RESTORATION
DENTIN HYPERSENSITIVITY—A PORTION CLOST CAUSING THE ODONTOBLASTS TO B
813 FRACTURED ALVEOLAR BONE—A BREAK OF THE LOWER JAW
815 FRACTURED MAXILLA—FRACTURE OR BREAK OF THE UPPER JAW
816 FRACTURED TOOTH—FRACTURE OR BREAK IN THE TOOTH WITH OR WITHOUT THE LOSS OF A PORTION OF THE TOOTHENAMEL
817 GINGIVITIS—ACUTE OR CHRONIC INFLAMMATION OF THE GINGIVA
818 MAXILLARY SINUSITIS—INFECTION OF SINUS AREA ACCOMPANIED BY INFLAMMATION AND DRAINAGE CONDITIONS MAY MIMIC
819 OCCLUSAL TRAUMA—TRAUMA TO THE INCISAL SURFACE OR OCCLUSION OF TEETH
R21 OSSEOUS SEQUESTRUM—BONE SPLINTERS
OSTEOMYELITIS—MICROBIAL INFECTION (
SOFT TISSUE TRAUMA, LACERATION—OR
824   PERICORONITIS/ERUPTING TOOTH—ACUTE INFLAMMATION OF TISSUE AREA SURROUNDING TOOTH, MOST COMMONLY ASSOCIATED WITH FRUPTING THIRD MOLARS
825 PERIODONTITIS/PERIDONTAL ABSCESS—ADVANCED GUM DISEASE AND INFLAMMATION WHICH CAUSES BONE LOSS RESULTING
826 POST OPERATIVE PROBLEM—CONDITIONS ASSOCIATED WITH PREVIOUS OPERATIVE TREATMENT SUCH AS BITE ADJUSTMENT,
827 POST SURGICAL PROBLEM—CONDITIONS ASSOCIATED WITH PREVIOUS SURGICAL TREATMENT SUCH AS SWELLING FROM
828 PROSTHESIS LOOSE—DETERIORATION OF ADHESION OF A FIXED OR REMOVABLE APPLIANCE THAT REPLACES MISSING TEETH (FOR FXAMPLE BRIDGES, DENTURES AND PARTIALS)

PC	PC DESCRIPTION
829	829 PROSTHESIS (BROKEN/MISSING)—ABSENCE, DETERIORATION DEFECT, OR FRACTURE OF A FIXED OR REMOVABLE APPLIANCE
	THAT REPLACES MISSING TEETH (FOR EXAMPLE BRIDGES, DENTURES AND PARTIALS)
830	830 PULPITIS (IRREVERSIBLE)—INFLAMMATION OF THE DENTAL PULP OR NERVE ASSOCIATED WITH THROBBING CONTINUOUS PAIN
	THAT IS SPONTANEOUS THAT LINGERS EVEN AFTER THE STIMULUS IS REMOVED
831	831 PULPITIS (REVERSIBLE)—INFLAMMATION OF THE DENTAL PULP OR NERVE ASSOCIATED WITH SHORT LIVED PAIN FOLLOWING
	APPLICATION OF HOT, COLD, SWEET, OR BITING STIMULUS
832	832 ROOT FRACTURE—FRACTURE OR BREAK IN PART OF THE TOOTH BELOW THE CROWN
833	833 SPACE INFECTION



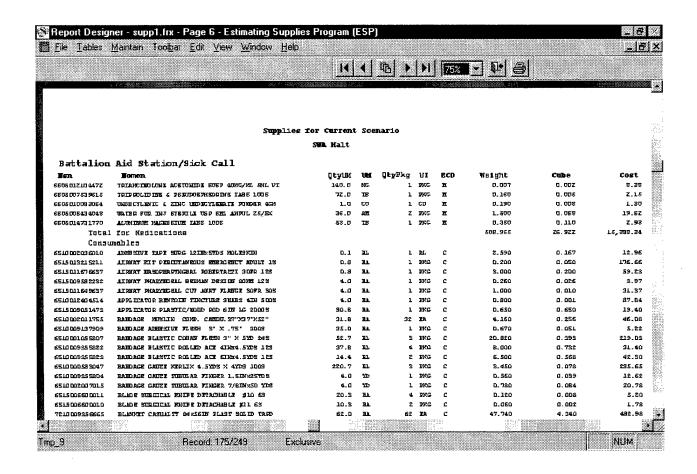
# sample output

Patient Stephies for Current Stephies
Patient Stream for Current Scenario
Patient Conditions Requiring a Supply
Tasks Requiring a Supply
Patient Conditions and Tasks for a Supply
Task Profile for a Patient Condition
Supplies for a Patient Condition
Tasks and Supplies for a Patient Condition
Patient Conditions for a Selected Task
Supplies for a Selected Task
Patient Conditions and Supplies for a Selected Task

#### **Supplies for Current Scenario**

**SWA Halt Scenario** 

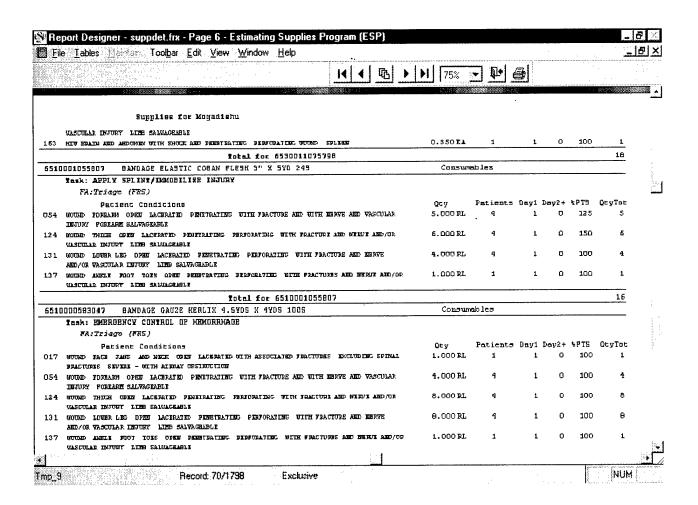
Selected functional areas for the report: First Responder and BAS



#### **Detailed Analysis of Supplies**

#### Mogadishu Scenario

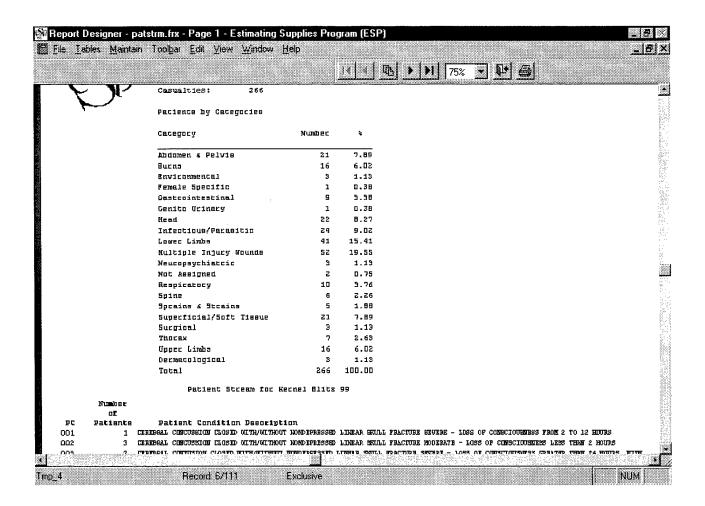
#### Selected functional areas for the report: FRS Triage, FRS OR, FRS Post-op



#### **Patient Stream for Current Scenario**

#### Kernel Blitz 99 Scenario

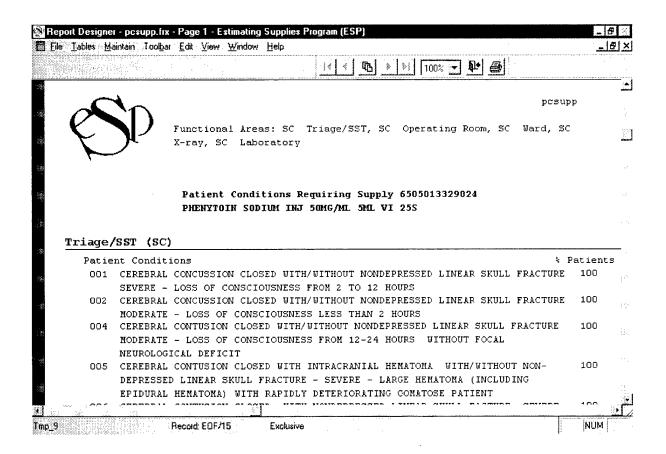
#### Selected functional area for the report: First Responder and BAS



#### **Patient Conditions Requiring a Supply**

#### Supply 6505013329024 Phenytoin Sodium Inj 50 MG/ML VI 25S

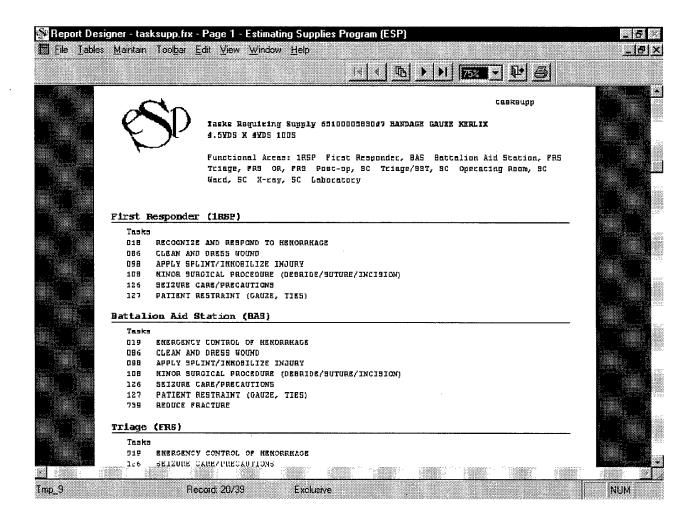
Selected functional areas for the query: SC Triage/SST, SC OR, SC Ward, SC X-ray, SC Lab



#### Tasks Requiring a Supply

Supply 6510000583047 Bandage Gauze Kerlix 4.5 YDS X 4 YDS 100S

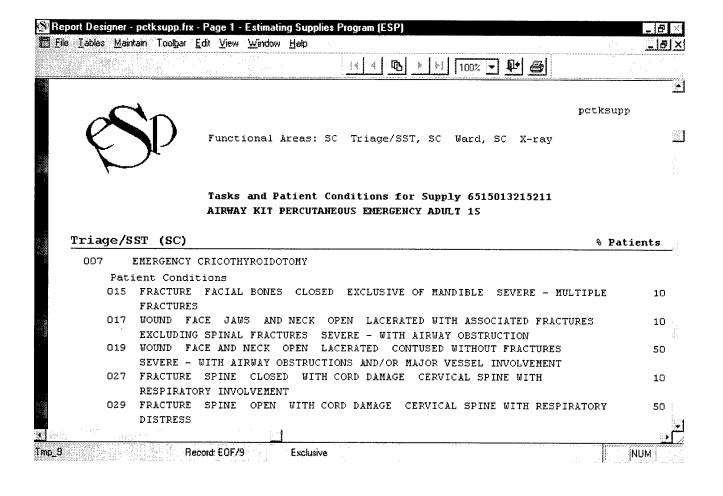
Selected functional areas for the query: First Responder, BAS, FRS Triage, FRS OR, FRS Post-op, SC Triage/SST, SC OR, SC Ward, SC X-ray, SC Lab



#### **Patient Conditions and Tasks for a Supply**

Supply 6515013215211
Airway Kit Percutaneous Emergency Adult IS

Selected functional areas for the query: SC Triage/SST, SC Ward, SC X-ray

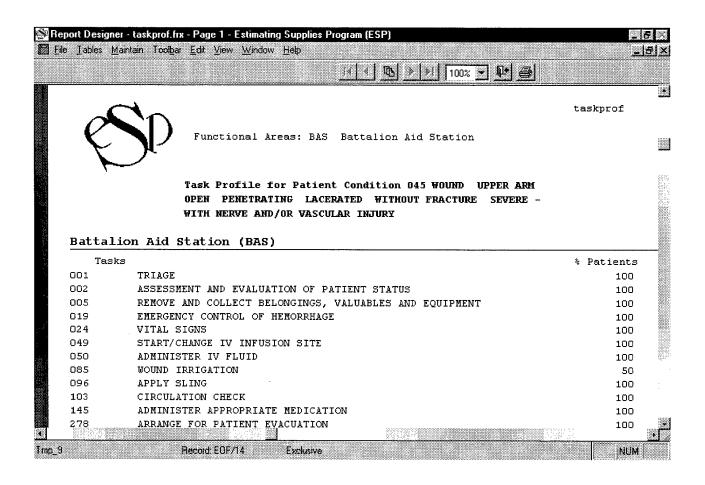


#### **Task Profile for a Patient Condition**

#### PC 045

Wound Upper Arm Open Penetrating Lacerated Without Fracture Severe With Nerve and/or Vascular Injury

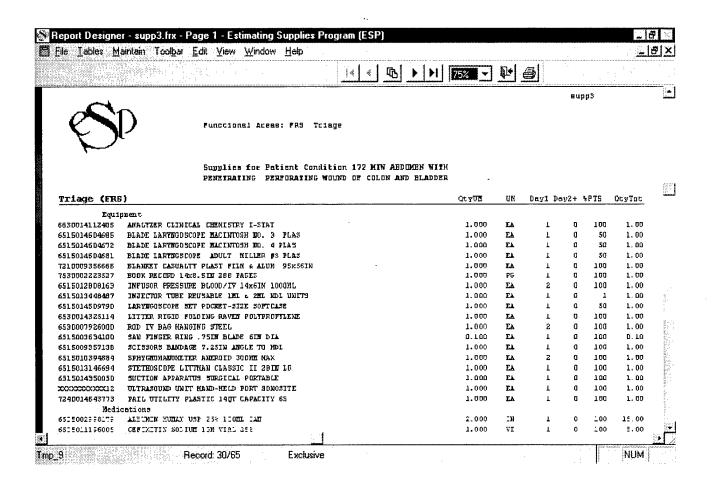
Selected functional area for the query: BAS



#### **Supplies for a Patient Condition**

# PC 172 Min Abdomen with Penetrating Perforating Wound of Colon and Bladder

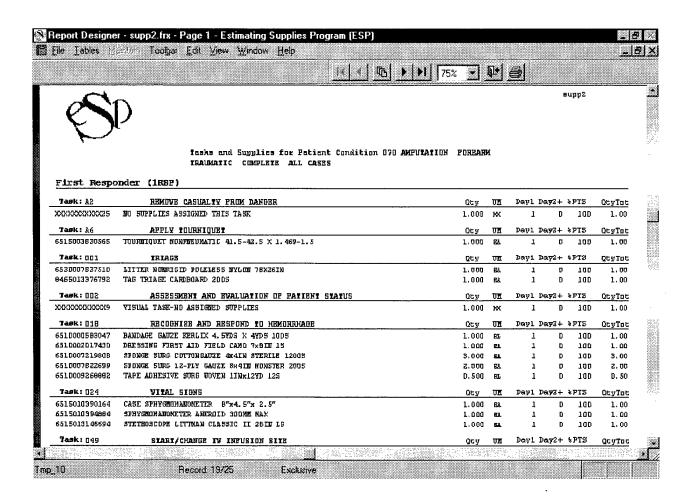
Selected functional area for the query: FRS Triage



#### **Tasks and Supplies for a Patient Condition**

# PC 070 Amputation Forearm Traumatic Complete All Cases

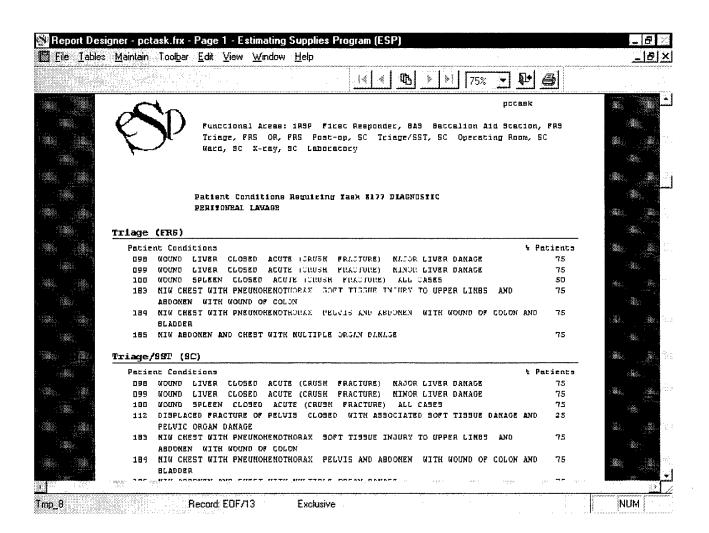
Selected functional area for the query: First Responder



#### **Patient Conditions for a Selected Task**

# Task Z177 Diagnostic Peritoneal Lavage

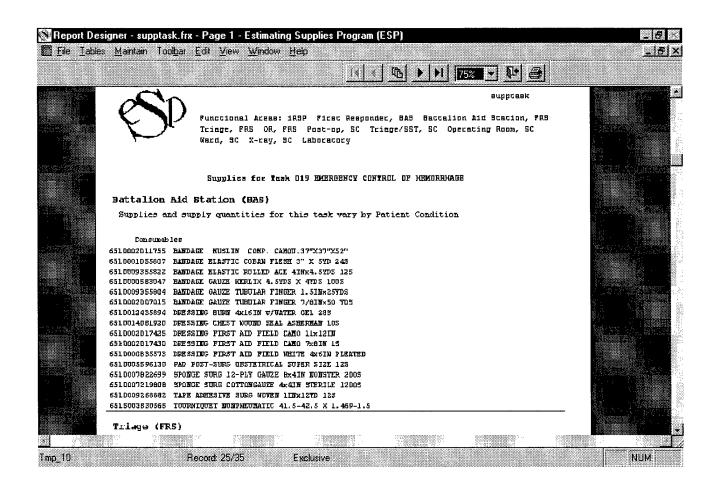
Selected functional areas for the query: First Responder, BAS, FRS Triage, FRS OR, FRS Post-op, SC Triage/SST, SC OR, SC Ward, SC X-ray, SC Lab



#### **Supplies for a Selected Task**

# Task 019 Emergency Control of Hemorrhage

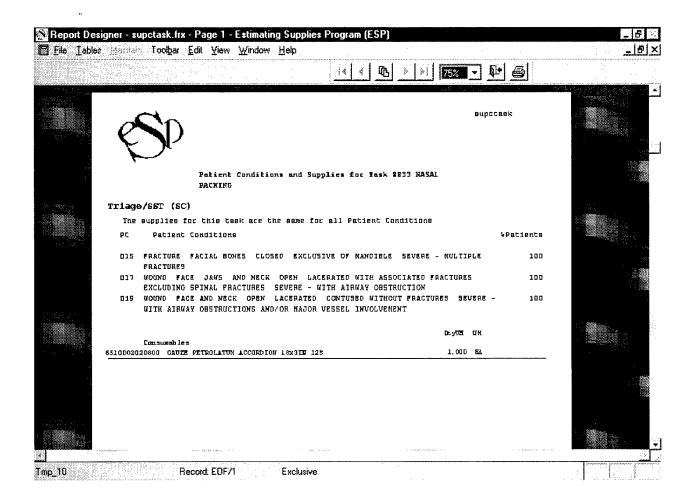
Selected functional areas for the query: First Responder, BAS, FRS Triage, FRS OR, FRS Post-op, SC Triage/SST, SC OR, SC Ward, SC X-ray, SC Lab



#### **Patient Conditions and Supplies for a Selected Task**

#### Task ZZ39 Nasal Packing

# Selected functional area for the query: SC Triage/SST



#### REPORT DOCUMENTATION PAGE

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1. Report Date (DD MM YY) Oct 2000	2. Report Type Final	3. DATES COVERED (from - to) Oct 1999 to Oct 2000
4. TITLE AND SUBTITLE Estimating Supplies Progra  6. AUTHORS Anne Topeano	5a. Contract Number: 5b. Grant Number: 5c. Program Element: 63706N 5d. Project Number: M0095	
7. PERFORMING ORGANIZATION Naval Health Research C P.O. Box 85122 San Diego, CA 92186-51	enter	5e. Task Number: 005 5f. Work Unit Number: 6809
	AGENCY NAMES(S) AND ADDRESS(ES) and Surgery	NUMBER Report No. TD-00-4D  10. Sponsor/Monitor's Acronyms(s) BUMED, ONR, MARCORSYSCOM  11. Sponsor/Monitor's Report Number(s)
		The opening in the post Number (6)

#### 12 DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution unlimited.

#### 13. SUPPLEMENTARY NOTES

#### 14. ABSTRACT (maximum 200 words)

The Estimating Supplies Program (ESP) is a user-friendly computer program designed to calculate the amount of supplies required by an operational scenario. Under the sponsorship of the Marine Corps Systems Command, the Naval Health Research Center (NHRC) developed the program for medical providers, trainers, and planners. The ESP User's Guide illustrates how to run ESP without complex technical language. The user selects a medical mission scenario by entering casualty flow data into ESP or by importing a patient stream from a casualty estimation program, such as FORECAS. ESP uses casualty estimates, level of care, and functional area to generate the supplies and equipment necessary to treat the given patient distribution.

NHRC designed, developed, and utilized a systematic process to review the Marine Corps medical supply requirements. This approach consisted of identifying the medical tasks required to treat patients with specific injuries and illnesses and determining the supplies and equipment required by each task. Over 130 Subject Matter Experts (SMEs) with operational experience participated in this process by reviewing treatment briefs, tasks, supplies, and equipment, and by examining their usefulness for Marine Corps medical providers in forward areas of care. To determine the amount of consumable supply requirements, a patient generating model was used to project the frequency of specific injuries and illnesses likely to occur in theater. Substantial reductions (approximately 30%) in the number of items, weight, and cube were achieved. By establishing the clinical requirement for each item pushed forward, the NHRC model was able to reduce the logistical burden carried by Marine Corps units and enhance far forward clinical capability. The result of this effort is a database that can be accessed to estimate supplies and equipment based on a given patient stream distribution.

NHRC has incorporated this research and the databases into ESP to provide medical planners, providers, trainers and logisticians with the ability to calculate the supplies and equipment needed to treat a particular patient distribution.

#### 15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:				19a. NAME OF RESPONSIBLE PERSON	
a. REPORT	b.ABSTRACT	HACI C. INIS PAGE		OF PAGES	Commanding Officer
UNCL	UNCL UNCL	UNCL		19b. TELEPHONE NUMBER (INCLUDING AREA CODE)	
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